

TEST REPORT

CERTIFICATE OF CONFORMITY

Standard: 47 CFR FCC Part 15, Subpart E (Section 15.407)

Report No.: RFBCKS-WTW-P25080470-2

FCC ID: 2ABLK-GS4139E

Product: WiFi7 AP

Brand: GigaSpire

Model No.: 7u10t.2 GS4139E, 7u10txg.2 GS4139XG

Received Date: 2025/8/27

Test Date: 2025/9/6 ~ 2025/11/20

Issued Date: 2025/11/25

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FCC Registration / 723255 / TW2022

Designation Number:

Approved by: _____

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, Date: _____

2025/11/25

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Prepared by : Phoenix Huang / Specialist



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Release Control Record

Issue No.	Description	Date Issued
RFBCKS-WTW-P25080470-2	Original release.	2025/11/25

1 Certificate

Product: WiFi7 AP

Brand: GigaSpire

Test Model: 7u10t.2 GS4139E, 7u10txg.2 GS4139XG

Sample Status: Engineering sample

Applicant: Calix Inc.

Test Date: 2025/9/6 ~ 2025/11/20

Standard: 47 CFR FCC Part 15, Subpart E (Section 15.407)

Measurement ANSI C63.10-2020

procedure: KDB 987594 D02 U-NII 6 GHz EMC Measurement v03

KDB 789033 D02 General UNII Test Procedure New Rules v02r01

KDB 662911 D01 Multiple Transmitter Output v02r01

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
Clause	Test Item	Result	Remark
15.407(a)(5)	Maximum RF Output Power	Pass	Meet the requirement of limit.
15.407(a)(5)	Maximum Power Spectral Density	Pass	Meet the requirement of limit.
15.407(a)(11)	Emission Bandwidth	Pass	Meet the requirement of limit.
---	Occupied Bandwidth	-	Reference only.
15.407(b)(9)	AC Power Conducted Emissions	Pass	Minimum passing margin is -1.41 dB at 0.38047 MHz
15.407(b)(9)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -3.2 dB at 39.97 MHz
15.407(b)(6) 15.407(b)(10)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -0.3 dB at 7125.00 MHz
15.407(b)(7)	In-Band Emission Mask	Pass	Meet the requirement of limit.
15.407(d)(6)	Contention-based Protocol	Pass	Meet the requirement of limit.
15.203	Antenna Requirement	Pass	Antenna connector is ipex(MHF) not a standard connector.

Notes:

1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
2. Per TCBC notice, FCC allows 99% BW measurements for Wi-Fi 320MHz BW mode instead of Emission Bandwidth.

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Specification	Expanded Uncertainty (k=2) (±)
Maximum RF Output Power	-	5.1 dB
Maximum Power Spectral Density	-	5.1 dB
Emission Bandwidth	-	1050.00 Hz
In-Band Emission Mask	9 kHz ~ 40 GHz	2.6 dB
Occupied Bandwidth	-	1050.00 Hz
Contention-based Protocol	-	2.7 dB
AC Power Conducted Emissions	150 kHz ~ 30 MHz	1.9 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	3.1 dB
	30 MHz ~ 1 GHz	5.5 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	5.1 dB
	18 GHz ~ 40 GHz	5.3 dB

The other instruments specified are routine verified to remain within the calibrated levels, no measurement uncertainty is required to be calculated.

2.2 Supplementary Information

There is not any deviation from the test standards for the test method, and no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	WiFi7 AP
Brand	GigaSpire
Test Model	7u10t.2 GS4139E, 7u10txg.2 GS4139XG
Status of EUT	Engineering sample
Power Supply Rating	12 Vdc from power adapter or 12 Vdc from UPS
Modulation Type	64QAM, 16QAM, QPSK, BPSK for OFDM 1024QAM for OFDMA in 11ax mode 4096QAM for OFDMA in 11be mode
Modulation Technology	OFDM, OFDMA
Transfer Rate	802.11a: up to 54 Mbps 802.11ax: up to 4083.9 Mbps 802.11be: up to 23059.2 Mbps
Operating Frequency	5.955 GHz ~ 6.415 GHz 6.425 GHz ~ 6.525 GHz 6.535 GHz ~ 6.865 GHz 6.875 GHz ~ 7.115 GHz
Number of Channel	802.11a, 802.11ax (HE20), 802.11be (EHT20): 59 802.11ax (HE40), 802.11be (EHT40): 29 802.11ax (HE80), 802.11be (EHT80): 14 802.11ax (HE160), 802.11be (EHT160): 7 802.11be (EHT320): 6
Output Power	5.955 GHz ~ 6.415 GHz: EIRP: 328.852 mW (25.17 dBm) 6.425 GHz ~ 6.525 GHz: EIRP: 336.512 mW (25.27 dBm) 6.535 GHz ~ 6.865 GHz: EIRP: 336.512 mW (25.27 dBm) 6.875 GHz ~ 7.115 GHz: EIRP: 273.527 mW (24.37 dBm)
Equipment Class	6ID: 15E 6 GHz Low-power indoor access point 6PP: 15E 6 GHz Subordinate indoor device

Note:

1. All models are listed as below.

Brand	Model	Difference
GigaSpire	7u10t.2 GS4139E	GigaSpire 7u10t.2, GS4139E, Triband 2+4+4 Wi-Fi 7 RG/Mesh, 10GE WAN, 10GE + 2.5GE + 2 GE LAN, 1 POTS, USB, AM PA
	7u10txg.2 GS4139XG	GigaSpire 7u10txg.2, GS4139XG, Triband 2+4+4 Wi-Fi 7 RG/Mesh, XGS WAN, 10GE + 2.5GE + 2 GE LAN, 1 POTS, USB, AM PA

2. The EUT uses following accessories.

Item	Brand	Model	Specification
AC Adapter 1	AMIGO	AMS340-1204000FU	AC Input: 100-240 Vac, 50/60 Hz, 2.0 A DC Output: 12V=, 4.0 A DC Output Cable: 1.5 m
AC Adapter 2	MOSO	MS-V4000R120-050A0-US	AC Input: 100-240 V~, 50/60 Hz, 1.3 A max DC Output: 12.0 V=, 4.0 A, 48 W DC Output Cable: 1.5 m

3. There are WLAN (2.4 GHz), WLAN (5 GHz) and WLAN (6 GHz) technology used for the EUT.

4. Simultaneously transmission combination.

Combination	Technology		
1	WLAN (2.4 GHz)	WLAN (5 GHz)	WLAN (6 GHz)

Note: The emission of the simultaneous operation has been evaluated and no non-compliance was found.

5. The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.

3.2 Antenna Description of EUT

1. The antenna information is listed as below.

Antenna NO.	RF Chain NO.	Brand	Model	Antenna Net Gain (dBi)	Frequency Range (GHz)	Antenna Type	Connector Type
2G_1	0	WNC	48XPAB0R	2.66	2.4~2.4835	Dipole	ipex(MHF)
2G_2	1	WNC	48XPAB0S	1.54	2.4~2.4835	Dipole	ipex(MHF)
5G_3	0	WNC	48XPAB09	4.03	5.15~5.25	Dipole	ipex(MHF)
				2.36	5.25~5.35		
				2.72	5.47~5.725		
				2.28	5.725~5.85		
5G_4	1	WNC	48XPAB09	3.33	5.15~5.25	Dipole	ipex(MHF)
				3.5	5.25~5.35		
				4.09	5.47~5.725		
				4.09	5.725~5.85		
5G_5	2	WNC	48XPAB09	4.27	5.15~5.25	Dipole	ipex(MHF)
				4.18	5.25~5.35		
				4.03	5.47~5.725		
				3.35	5.725~5.85		
5G_6	3	WNC	48XPAB09	3.18	5.15~5.25	Dipole	ipex(MHF)
				2.69	5.25~5.35		
				4.46	5.47~5.725		
				4.1	5.725~5.85		
6G_7	0	WNC	48XPAB0T	3.56	5.925~6.425	Dipole	ipex(MHF)
				2.74	6.425~6.525		
				3.47	6.525~6.875		
				3.47	6.875~7.125		
6G_8	1	WNC	48XPAB0U	2.99	5.925~6.425	Dipole	ipex(MHF)
				3.44	6.425~6.525		
				3.76	6.525~6.875		
				4.9	6.875~7.125		
6G_9	2	WNC	48XPAB0V	4.68	5.925~6.425	Dipole	ipex(MHF)
				4.71	6.425~6.525		
				4.86	6.525~6.875		
				4.66	6.875~7.125		
6G_10	3	WNC	48XPAB0W	3.77	5.925~6.425	Dipole	ipex(MHF)
				4.33	6.425~6.525		
				4.33	6.525~6.875		
				4.79	6.875~7.125		

* Detail antenna specification please refer to antenna datasheet and/or antenna measurement report.

2. The EUT incorporates a MIMO function:

6 GHz Band		
Modulation Mode	TX & RX Configuration	
802.11a	4TX	4RX
802.11ax (HE20)	4TX	4RX
802.11ax (HE40)	4TX	4RX
802.11ax (HE80)	4TX	4RX
802.11ax (HE160)	4TX	4RX
802.11be (EHT20)	4TX	4RX
802.11be (EHT40)	4TX	4RX
802.11be (EHT80)	4TX	4RX
802.11be (EHT160)	4TX	4RX
802.11be (EHT320)	4TX	4RX

Note:

1. All of modulation mode support beamforming function except 802.11a modulation mode.
2. The EUT support Beamforming and CDD mode, therefore both mode were investigated and the worst case scenario was identified. The worst case data were presented in test report.
3. The modulation and bandwidth of 802.11ax and 802.11be modes are similar at 20 MHz (40 MHz, 80 MHz, 160 MHz). Therefore the investigated worst case is the representative mode in test report.

3.3 Channel List

U-NII-5:

24 channels are provided for 802.11a, 802.11ax (HE20), 802.11be (EHT20):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	5955 MHz	5	5975 MHz	9	5995 MHz	13	6015 MHz
17	6035 MHz	21	6055 MHz	25	6075 MHz	29	6095 MHz
33	6115 MHz	37	6135 MHz	41	6155 MHz	45	6175 MHz
49	6195 MHz	53	6215 MHz	57	6235 MHz	61	6255 MHz
65	6275 MHz	69	6295 MHz	73	6315 MHz	77	6335 MHz
81	6355 MHz	85	6375 MHz	89	6395 MHz	93	6415 MHz

12 channels are provided for 802.11ax (HE40), 802.11be (EHT40):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
3	5965 MHz	11	6005 MHz	19	6045 MHz	27	6085 MHz
35	6125 MHz	43	6165 MHz	51	6205 MHz	59	6245 MHz
67	6285 MHz	75	6325 MHz	83	6365 MHz	91	6405 MHz

6 channels are provided for 802.11ax (HE80), 802.11be (EHT80):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
7	5985 MHz	23	6065 MHz	39	6145 MHz	55	6225 MHz
71	6305 MHz	87	6385 MHz				

3 channels are provided for 802.11ax (HE160), 802.11be (EHT160):

Channel	Frequency	Channel	Frequency	Channel	Frequency
15	6025 MHz	47	6185 MHz	79	6345 MHz

2 channels are provided for 802.11be (EHT320):

Channel	Frequency	Channel	Frequency
31	6105 MHz	63	6265 MHz

U-NII-6:

5 channels are provided for 802.11a, 802.11ax (HE20), 802.11be (EHT20):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
97	6435 MHz	101	6455 MHz	105	6475 MHz	109	6495 MHz
113	6515 MHz						

3 channels are provided for 802.11ax (HE40), 802.11be (EHT40):

Channel	Frequency	Channel	Frequency	Channel	Frequency
99	6445 MHz	107	6485 MHz	*115	6525 MHz

1 channel is provided for 802.11ax (HE80), 802.11be (EHT80):

Channel	Frequency
103	6465 MHz

1 channel is provided for 802.11ax (HE160), 802.11be (EHT160):

Channel	Frequency
*111	6505 MHz

1 channel is provided for 802.11be (EHT320):

Channel	Frequency
*95	6425 MHz

U-NII-7:

17 channels are provided for 802.11a, 802.11ax (HE20), 802.11be (EHT20):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
117	6535 MHz	121	6555 MHz	125	6575 MHz	129	6595 MHz
133	6615 MHz	137	6635 MHz	141	6655 MHz	145	6675 MHz
149	6695 MHz	153	6715 MHz	157	6735 MHz	161	6755 MHz
165	6775 MHz	169	6795 MHz	173	6815 MHz	177	6835 MHz
181	6855 MHz						

8 channels are provided for 802.11ax (HE40), 802.11be (EHT40):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
123	6565 MHz	131	6605 MHz	139	6645 MHz	147	6685 MHz
155	6725 MHz	163	6765 MHz	171	6805 MHz	179	6845 MHz

5 channels are provided for 802.11ax (HE80), 802.11be (EHT80):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
*119	6545 MHz	135	6625 MHz	151	6705 MHz	167	6785 MHz
*183	6865 MHz						

2 channels are provided for 802.11ax (HE160), 802.11be (EHT160):

Channel	Frequency	Channel	Frequency
143	6665 MHz	*175	6825 MHz

2 channels are provided for 802.11be (EHT320):

Channel	Frequency	Channel	Frequency
*127	6585 MHz	*159	6745 MHz

U-NII-8:

13 channels are provided for 802.11a, 802.11ax (HE20), 802.11be (EHT20):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
*185	6875 MHz	189	6895 MHz	193	6915 MHz	197	6935 MHz
201	6955 MHz	205	6975 MHz	209	6995 MHz	213	7015 MHz
217	7035 MHz	221	7055 MHz	225	7075 MHz	229	7095 MHz
233	7115 MHz						

6 channels are provided for 802.11ax (HE40), 802.11be (EHT40):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
*187	6885 MHz	195	6925 MHz	203	6965 MHz	211	7005 MHz
219	7045 MHz	227	7085 MHz				

2 channels are provided for 802.11ax (HE80), 802.11be (EHT80):

Channel	Frequency	Channel	Frequency
199	6945 MHz	215	7025 MHz

1 channel is provided for 802.11ax (HE160), 802.11be (EHT160):

Channel	Frequency
207	6985 MHz

1 channel is provided for 802.11be (EHT320):

Channel	Frequency
*191	6905 MHz

Note: * mean these are straddle channels.

3.4 Test Mode Applicability and Tested Channel Detail

Pre-Scan:	1. The AC Adapter has the following models: AMS340-1204000FU / MS-V4000R120-050A0-US / modular 8Pin DC input. Pre-scan these models of AC Adapters and find the worst case as a representative test condition. 2. EUT can be used in the following ways: Lying/ Standing. Pre-scan these ways and find the worst case as a representative test condition. 3. Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
Worst Case:	1. AC Adapter worst condition: MS-V4000R120-050A0-US 2. Lying/ Standing worst condition: Lying type

Following channel(s) was (were) selected for the final test as listed below:

Test Item	EUT Configure Mode	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter
Maximum RF Output Power	A	802.11a	CDD	1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	6Mb/s
		802.11be (EHT20)	CDD & Beamforming	1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	MCS0
		802.11be (EHT40)	CDD & Beamforming	3, 43, 91, 99, 107, 115, 123, 155, 179, 187, 211, 227	BPSK	MCS0
		802.11be (EHT80)	CDD & Beamforming	7, 39, 87, 103, 119, 135, 151, 167, 183, 199, 215	BPSK	MCS0
		802.11be (EHT160)	CDD & Beamforming	15, 47, 79, 111, 143, 175, 207	BPSK	MCS0
		802.11be (EHT320)	CDD & Beamforming	31, 63, 95, 127, 159, 191	BPSK	MCS0
Maximum Power Spectral Density	A	802.11a	CDD	1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	6Mb/s
		802.11be (EHT20)	CDD & Beamforming	1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	MCS0
		802.11be (EHT40)	CDD & Beamforming	3, 43, 91, 99, 107, 115, 123, 155, 179, 187, 211, 227	BPSK	MCS0
		802.11be (EHT80)	CDD & Beamforming	7, 39, 87, 103, 119, 135, 151, 167, 183, 199, 215	BPSK	MCS0
		802.11be (EHT160)	CDD & Beamforming	15, 47, 79, 111, 143, 175, 207	BPSK	MCS0
		802.11be (EHT320)	CDD & Beamforming	31, 63, 95, 127, 159, 191	BPSK	MCS0

Test Item	EUT Configure Mode	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter
Emission Bandwidth	A	802.11a	CDD	1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	6Mb/s
		802.11be (EHT20)	CDD	1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	MCS0
		802.11be (EHT40)	CDD	3, 43, 91, 99, 107, 115, 123, 155, 179, 187, 211, 227	BPSK	MCS0
		802.11be (EHT80)	CDD	7, 39, 87, 103, 119,135, 151, 167, 183, 199, 215	BPSK	MCS0
		802.11be (EHT160)	CDD	15, 47, 79, 111, 143, 175, 207	BPSK	MCS0
		802.11be (EHT320)	CDD	31, 63, 95, 127, 159, 191	BPSK	MCS0
In-Band Emission Mask	A	802.11a	CDD	1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	6Mb/s
		802.11be (EHT20)	CDD	1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	MCS0
		802.11be (EHT40)	CDD	3, 43, 91, 99, 107, 115, 123, 155, 179, 187, 211, 227	BPSK	MCS0
		802.11be (EHT80)	CDD	7, 39, 87, 103, 119,135, 151, 167, 183, 199, 215	BPSK	MCS0
		802.11be (EHT160)	CDD	15, 47, 79, 111, 143, 175, 207	BPSK	MCS0
		802.11be (EHT320)	CDD	31, 63, 95, 127, 159, 191	BPSK	MCS0
Occupied Bandwidth	A	802.11a	CDD	1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	6Mb/s
		802.11be (EHT20)	CDD	1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	MCS0
		802.11be (EHT40)	CDD	3, 43, 91, 99, 107, 115, 123, 155, 179, 187, 211, 227	BPSK	MCS0
		802.11be (EHT80)	CDD	7, 39, 87, 103, 119,135, 151, 167, 183, 199, 215	BPSK	MCS0
		802.11be (EHT160)	CDD	15, 47, 79, 111, 143, 175, 207	BPSK	MCS0
		802.11be (EHT320)	CDD	31, 63, 95, 127, 159, 191	BPSK	MCS0

Test Item	EUT Configure Mode	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter
Contention-based Protocol	A	802.11be (EHT20)	CDD	37, 101, 133, 229	BPSK	MCS0
		802.11be (EHT320)	CDD	31, 95, 159, 191	BPSK	MCS0
AC Power Conducted Emissions	A, B	802.11be (EHT320)	CDD	95	BPSK	MCS0
Unwanted Emissions below 1 GHz	A, B	802.11be (EHT320)	CDD	95	BPSK	MCS0
Unwanted Emissions above 1 GHz	A	802.11a	CDD & Beamforming	1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	6Mb/s
		802.11be (EHT20)	CDD & Beamforming	1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	MCS0
		802.11be (EHT40)	CDD & Beamforming	3, 43, 91, 99, 107, 115, 123, 155, 179, 187, 211, 227	BPSK	MCS0
		802.11be (EHT80)	CDD & Beamforming	7, 39, 87, 103, 119,135, 151, 167, 183, 199, 215	BPSK	MCS0
		802.11be (EHT160)	CDD & Beamforming	15, 47, 79, 111, 143, 175, 207	BPSK	MCS0
		802.11be (EHT320)	CDD & Beamforming	31, 63, 95, 127, 159, 191	BPSK	MCS0
EUT Configure Mode:	A	7u10t.2 GS4139E				
	B	7u10txg.2 GS4139XG				
Note: Partial RU (resource unit) and channel puncturing mechanisms are not supported.						

3.5 Duty Cycle of Test Signal

802.11a: Duty cycle = 1.959 ms / 1.989 ms x 100% = 98.5%

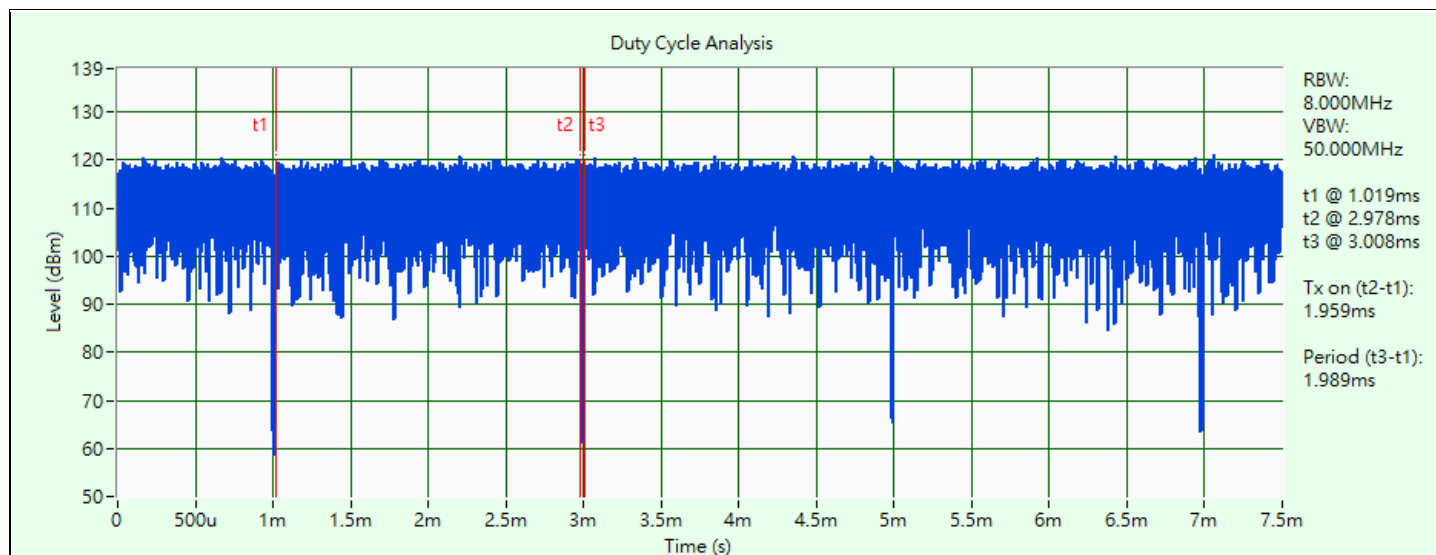
802.11be (EHT20): Duty cycle = 4.526 ms / 4.577 ms x 100% = 98.9%

802.11be (EHT40): Duty cycle = 5.255 ms / 5.321 ms x 100% = 98.8%

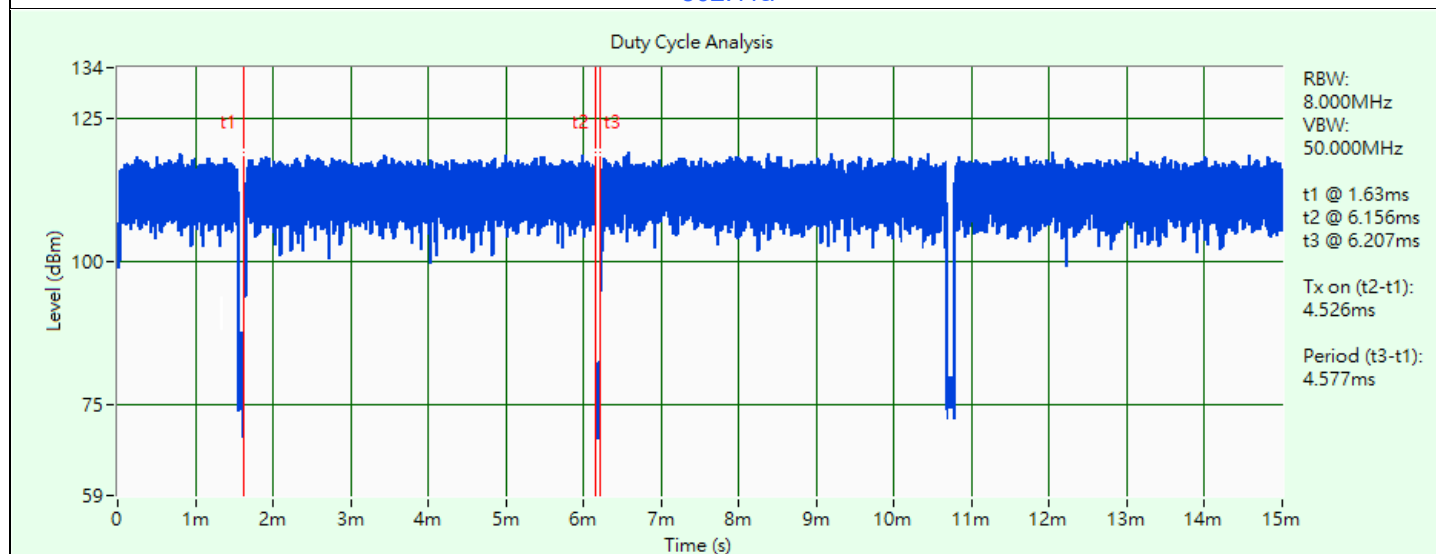
802.11be (EHT80): Duty cycle = 5.285 ms / 5.469 ms x 100% = 96.6%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.15$ dB

802.11be (EHT160): Duty cycle = 5.285 ms / 5.423 ms x 100% = 97.5%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.11$ dB

802.11be (EHT320): Duty cycle = 5.457 ms / 5.594 ms x 100% = 97.6%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.11$ dB

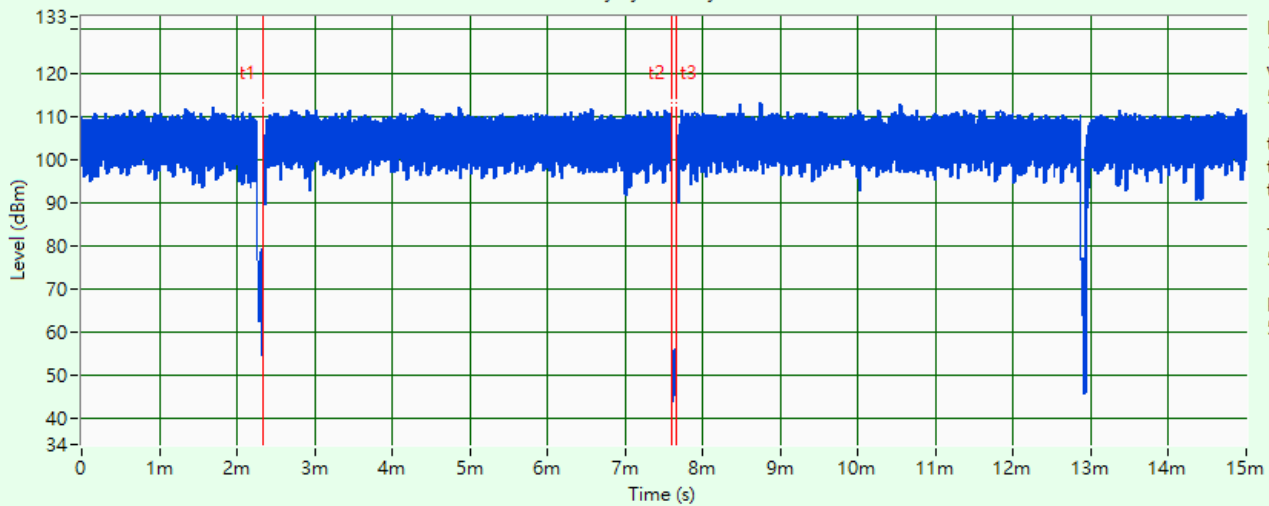


802.11a



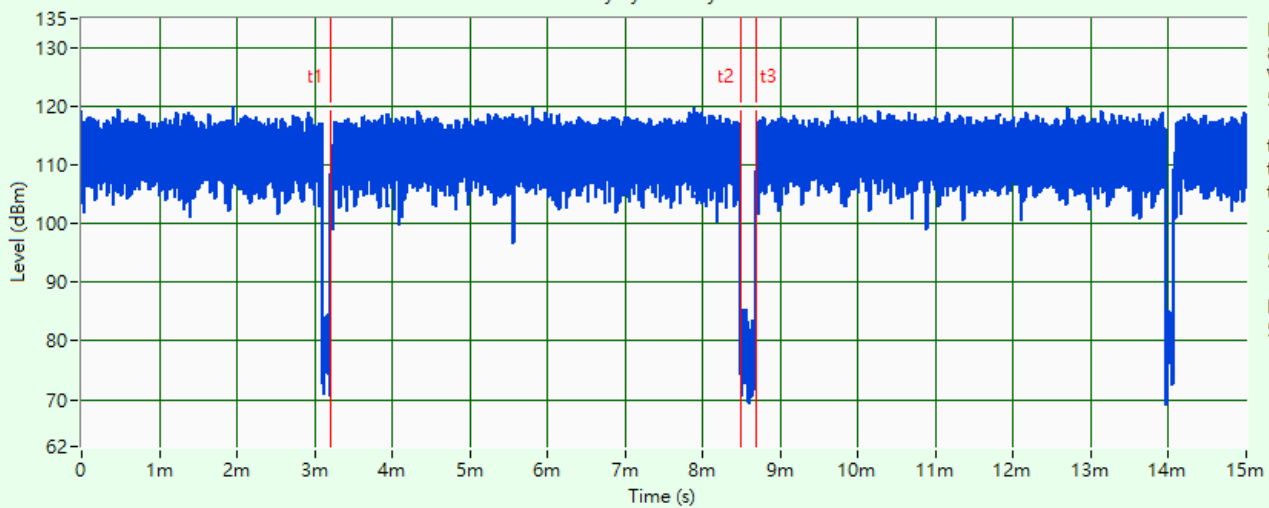
802.11be (EHT20)

Duty Cycle Analysis



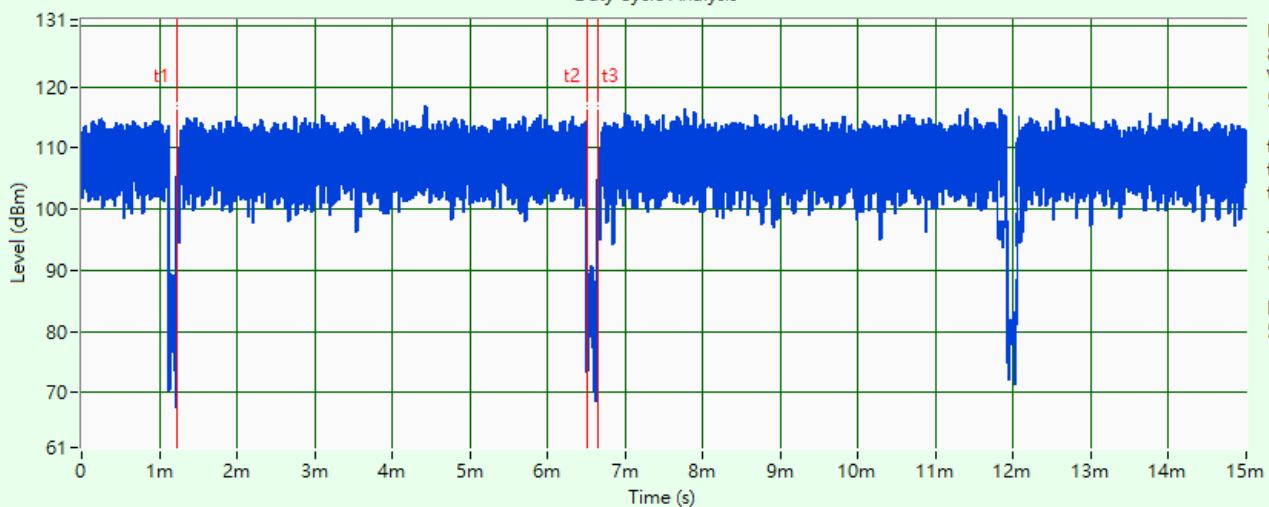
802.11be (EHT40)

Duty Cycle Analysis

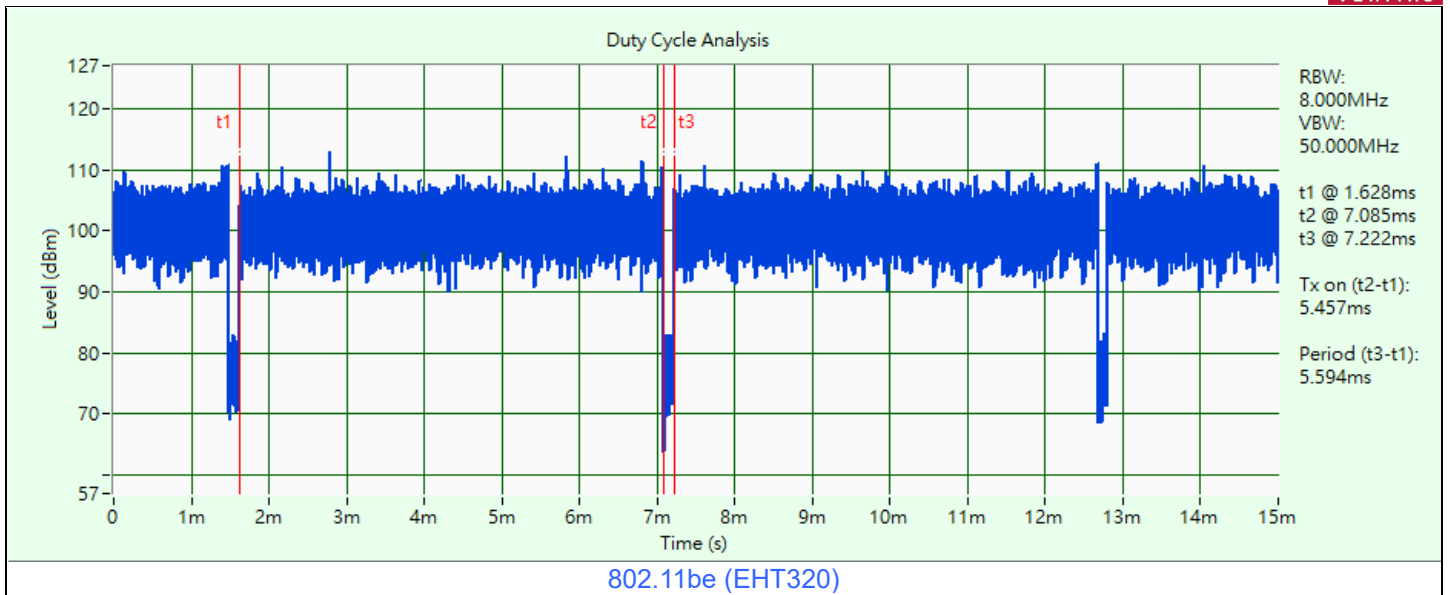


802.11be (EHT80)

Duty Cycle Analysis



802.11be (EHT160)

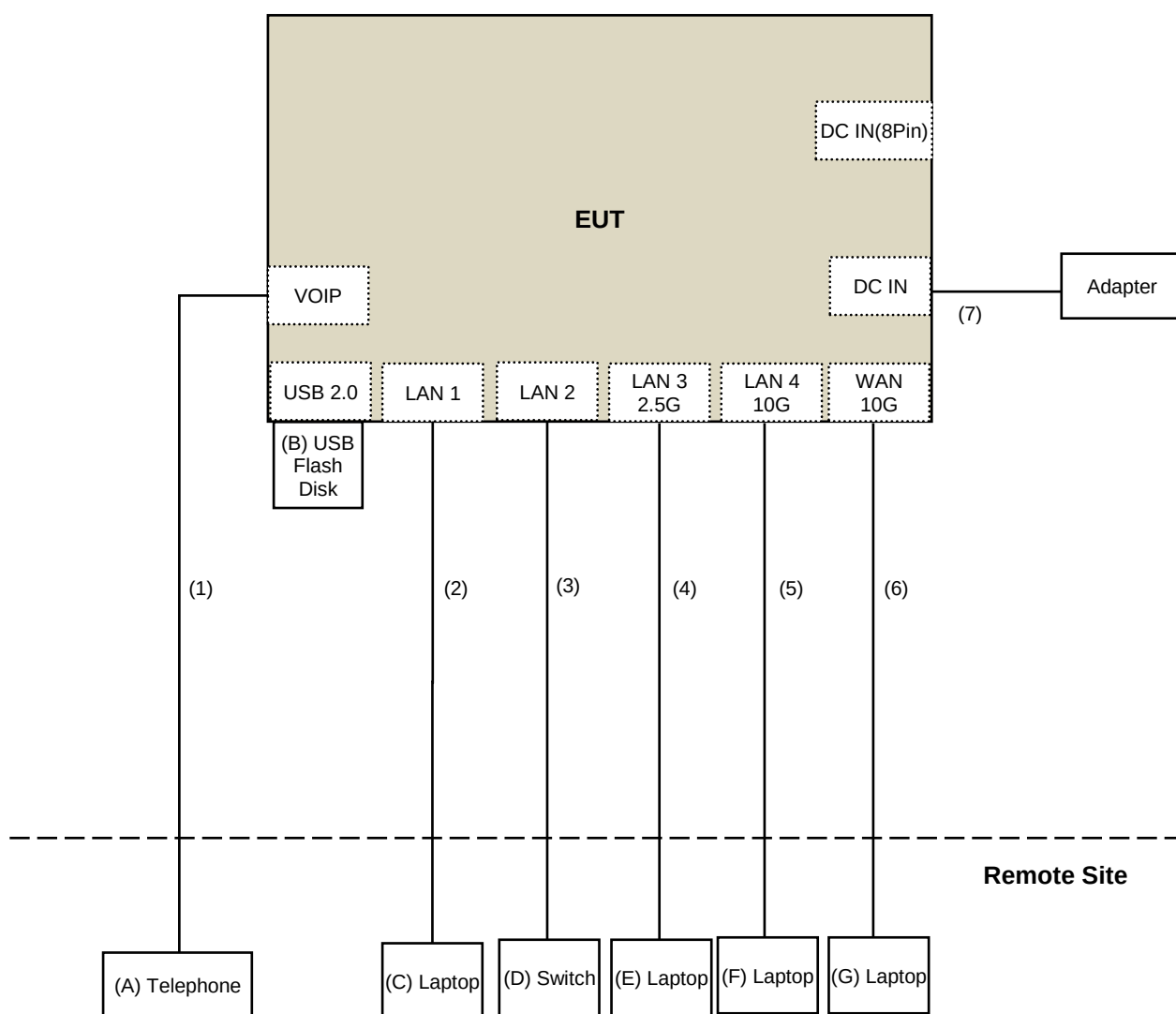


3.6 Test Program Used and Operation Descriptions

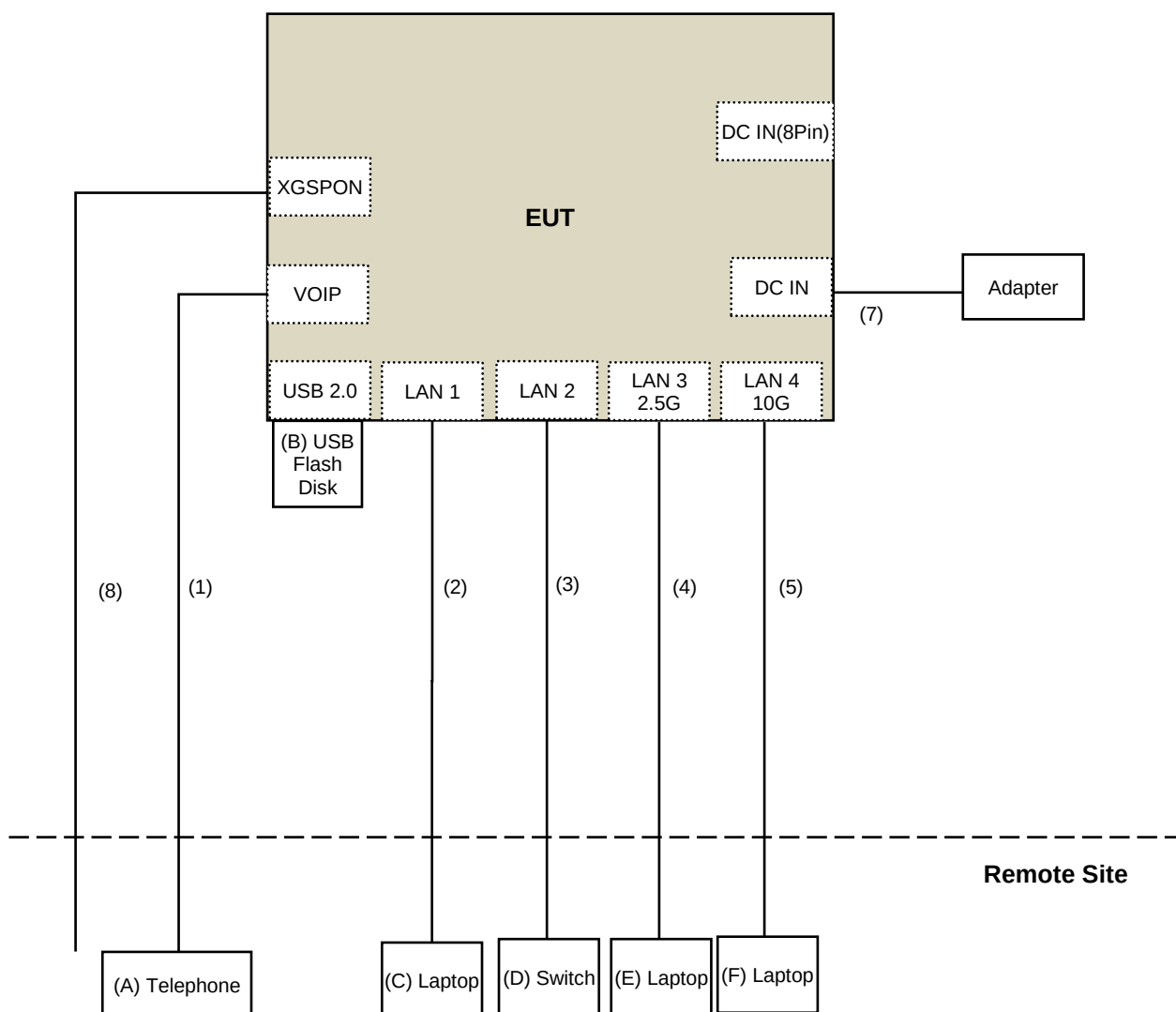
Controlling software (QSPR v6.00.00114.1) has been activated to set the EUT under transmission condition continuously at specific channel frequency.

3.7 Connection Diagram of EUT and Peripheral Devices

Mode A



Mode B



3.8 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Telephone	Wonder	WD-303	N/A	N/A	Provided by Lab
B	USB Flash Disk	SanDisk	SDDDC3-032G-I35NB	BM22065835SW	N/A	Provided by Lab
C	Laptop	Acer	TMP214	N/A	N/A	Supplied by applicant
D	Switch	D-Link	DGS-1005D	DR8WC92000523	N/A	Provided by Lab
E	Laptop	Lenovo	L480	RF1PRC03	N/A	Provided by Lab
F	Laptop	DELL	E6230	H86M3X1	N/A	Provided by Lab
G	Laptop	DELL	E6230	1BCMLX1	N/A	Provided by Lab

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	RJ-11 Cable	1	10	No	0	Provided by Lab
2	RJ-45 Cable	1	10	No	0	Provided by Lab
3	RJ-45 Cable	1	10	No	0	Provided by Lab
4	RJ-45 Cable	1	10	No	0	Provided by Lab
5	RJ-45 Cable	1	10	No	0	Provided by Lab
6	RJ-45 Cable	1	10	No	0	Provided by Lab
7	DC Cable	1	1.5	No	0	Supplied by applicant
8	Fiber Cable	1	10	No	0	Provided by Lab

4 Test Instruments

The calibration interval of the all test instruments are 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.1 Maximum RF Output Power

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	N/A	N/A
Horn Antenna Schwarzbeck	BBHA 9120D	9120D-783	2025/11/9	2026/11/8
MXA Signal Analyzer Keysight	N9020B	MY60112410	2025/3/17	2026/3/16
Preamplifier EMCI	EMC12630SE	980688	2025/8/7	2026/8/6
RF Coaxial Cable EMCI	EMC104-SM-SM-1200	160922	2025/1/14	2026/1/13
	EMC104-SM-SM-2000	180502	2025/1/14	2026/1/13
	EMC104-SM-SM-6000	210704	2025/10/22	2026/10/21
Software	ADT_Radiated_V8.7.08	N/A	N/A	N/A

Notes:

1. The test was performed in 966 Chamber No. 4.
2. Tested Date: 2025/11/20

4.2 Maximum Power Spectral Density

Refer to section 4.1 to get the tested date and information of the instruments.

4.3 Emission Bandwidth

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Fixed Attenuator Woken	00800A1K01A-10	00800A1K01A-10-01	2025/5/23	2026/5/22
MXA Signal Analyzer Keysight	N9020B	MY60112408	2025/3/12	2026/3/11
Software	ADT_RF Test Software V8	N/A	N/A	N/A

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2025/11/20

4.4 In-Band Emission Mask

Refer to section 4.3 to get the tested date and information of the instruments.

4.5 Occupied Bandwidth

Refer to section 4.3 to get the tested date and information of the instruments.

4.6 Contention-based Protocol

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Frequency Extender Keysight	N5182BX07	MY59360203	2025/4/14	2026/4/13
MXG Vector Signal Generator Keysight	N5182B	MY59100182	2025/4/14	2026/4/13
Power Splitter/Combiner Mini-Circuits	ZFRSC-123-S+	F698501347_01	2025/10/22	2026/10/21
		F698501347_02	2025/10/22	2026/10/21
PXA Signal Analyzer Keysight	N9030B	MY57140488	2025/3/11	2026/3/10
Signal & Spectrum Analyzer R&S	FSV3044	101506	2025/6/12	2026/6/11

Notes:

1. The test was performed in Adaptivity room.
2. Tested Date: 2025/11/20

4.7 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
50 ohm terminal resistance Telegartner	50 ohm	3	2025/10/29	2026/10/28
EMI Test Receiver R&S	ESCS 30	100375	2025/5/21	2026/5/20
Fixed Attenuator STI	STI02-2200-10	005	2025/2/17	2026/2/16
LISN R&S	ESH3-Z5	835239/001	2025/3/27	2026/3/26
		848773/004	2025/10/3	2026/10/2
RF Coaxial Cable JYEBAO	5D-FB	COCCAB-001	2025/2/17	2026/2/16
Software BVADT	BVADT_Cond_V7.3.7.4	N/A	N/A	N/A

Notes:

1. The test was performed in Conduction 1
2. Tested Date: 2025/11/17 ~ 2025/11/18

4.8 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-406	2025/9/17	2026/9/16
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	N/A	N/A
Fixed Attenuator Mini-Circuits	UNAT-5+	PAD-ATT5-03	2025/2/15	2026/2/14
Loop Antenna TESEQ	HLA 6121	63620	2025/10/20	2026/10/19
MXE EMI Receiver Agilent	N9038A	MY51210202	2025/7/30	2026/7/29
Preamplifier EMCI	EMC330N	980701	2025/2/15	2026/2/14
	EMC001340	980142	2025/2/17	2026/2/16
RF Coaxial Cable mTJ	100100-CFD400LW-200	CFD400-200	2025/2/15	2026/2/14
	100100-CFD400LW-400	CFD400-400	2025/2/15	2026/2/14
	100100-CFD400LW-800	CFD400-800	2025/2/15	2026/2/14
Software	ADT_Radiated_V8.7.08	N/A	N/A	N/A

Notes:

1. The test was performed in 966 Chamber No. 4.
2. Tested Date: 2025/11/17

4.9 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	N/A	N/A
Horn Antenna Schwarzbeck	BBHA 9120D	9120D-783	2024/11/10 2025/11/9	2025/11/9 2026/11/8
	BBHA 9170	9170-739	2025/11/9	2026/11/8
MXA Signal Analyzer Keysight	N9020B	MY60112410	2025/3/17	2026/3/16
Preamplifier EMCI	EMC12630SE	980688	2025/8/7	2026/8/6
	EMC184045SE	980387	2025/8/7	2026/8/6
RF Coaxial Cable EMCI	EMC102-KM-KM-1200	160924	2025/1/24	2026/1/23
	EMC102-KM-KM-4000	200214	2025/1/24	2026/1/23
	EMC104-SM-SM-1200	160922	2025/1/14	2026/1/13
	EMC104-SM-SM-2000	180502	2025/1/14	2026/1/13
	EMC104-SM-SM-6000	210704	2024/10/30 2025/10/22	2025/10/29 2026/10/21
Software	ADT_Radiated_V8.7.08	N/A	N/A	N/A

Notes:

1. The test was performed in 966 Chamber No. 4.
2. Tested Date: 2025/9/6 ~ 2025/11/18

5 Limits of Test Items

5.1 Maximum RF Output Power

Operation Band	Equipment Class	Limit
		Maximum Average Power
U-NII-5 U-NII-6 U-NII-7 U-NII-8	6ID: 15E 6 GHz Low-power indoor access point 6PP: 15E 6 GHz Subordinate indoor device	EIRP 30 dBm

5.2 Maximum Power Spectral Density

Operation Band	Equipment Class	Limit
		Maximum Power Density
U-NII-5 U-NII-6 U-NII-7 U-NII-8	6ID: 15E 6 GHz Low-power indoor access point 6PP: 15E 6 GHz Subordinate indoor device	EIRP 5 dBm/MHz

5.3 Emission Bandwidth

The maximum transmitter channel bandwidth for U-NII devices in the 5.925-7.125 GHz band is 320 MHz.

5.4 In-Band Emission Mask

Test Item	Frequencies (MHz)	(X) dBc* ¹
Emission Mask	At 1 MHz outside of channel edge	20
	At one channel bandwidth from the channel center* ²	28
	At one- and one-half times the channel bandwidth away from channel center* ³	40
	More than one- and one-half times the channel bandwidth	40

*¹ : The power spectral density must be suppressed by "x" dB

*² : At frequencies between one megahertz outside an unlicensed device's channel edge and one channel bandwidth from the center of the channel, the limits must be linearly interpolated between 20 dB and 28 dB suppression,

*³ : At frequencies between one and one- and one-half times an unlicensed device's channel bandwidth, the limits must be linearly interpolated between 28 dB and 40 dB suppression.

5.5 Occupied Bandwidth

The results are for reference only.

5.6 Contention-based Protocol

Unlicensed indoor low-power devices must detect co-channel radio frequency power that is at least -62 dBm (The threshold is referenced to a 0 dBi antenna gain.) or lower. Additionally, indoor low-power devices must detect co-channel energy with 90% or greater certainty.

5.7 AC Power Conducted Emissions

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30.0	60	50

Notes:

1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.

5.8 Unwanted Emissions below 1 GHz

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table.

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

Notes:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).

5.9 Unwanted Emissions above 1 GHz

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table.

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
Above 960	500	3

Notes:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000 MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20 dB under any condition of modulation.

Limits of unwanted emission out of the restricted bands

Frequencies (MHz)	EIRP Limit	Equivalent Field Strength at 3 m
5925 MHz > F > 7125 MHz	Peak: -7 (dBm/MHz)	88.2 (dBuV/m)
	Average: -27 (dBm/MHz)	68.2 (dBuV/m)

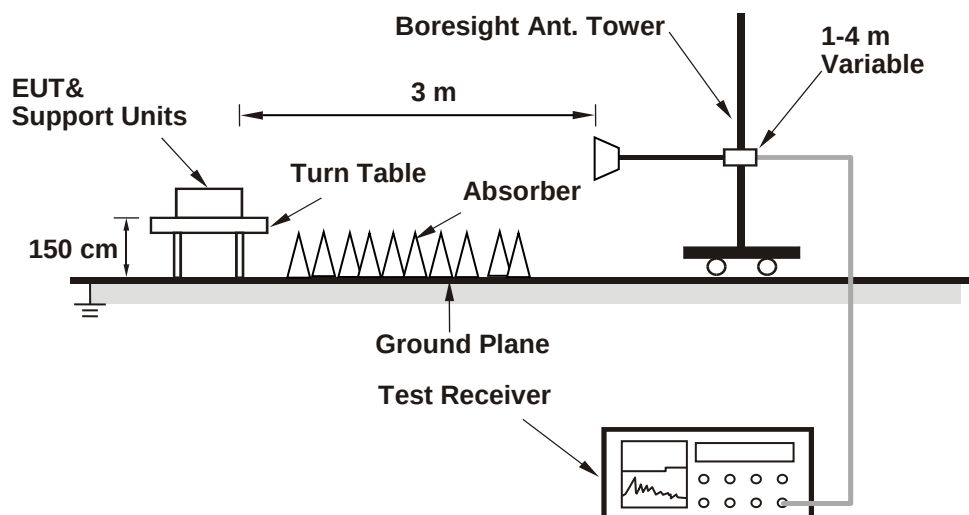
Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

$$E = \frac{1000000\sqrt{30P}}{3} \mu\text{V/m, where P is the eirp (Watts).}$$

6 Test Arrangements

6.1 Maximum RF Output Power

6.1.1 Test Setup



6.1.2 Test Procedure

- The EUT was placed on the top of a rotating table 1.5 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- Perform a field strength measurement and record the worse read value, is the field strength value via a spectrum reading obtained corrected for antenna factor, cable loss and pre-amplifier factor and then mathematically convert the measured field strength level to EIRP level.
- Follow ANSI C63.10 section 12.7.3, $EIRP \text{ Value (dBm)} = \text{Field Strength Value (dBuV / m)} + \text{Correction Factor @ 3 m}$.
- $\text{Correction Factor (dB) @ 3 m} = 20\log(D) - 104.77 = -95.23 \text{ dB}$; where D is the measurement distance @ 3 m.

Spectrum analyzer setting as below:

Method SA-1

- Set span to encompass the entire 99% OBW of the signal.
- Set RBW = 1 MHz, Set VBW ≥ 3 MHz, Detector = RMS.
- Number of points in sweep $\geq [2 \times \text{span} / \text{RBW}]$. (This gives bin-to-bin spacing $\leq \text{RBW} / 2$, so that narrowband signals are not lost between frequency bins.)
- Sweep time = auto, trigger set to "free run".
- Trace average at least 100 traces in power averaging mode.
- Record the max value.

Note: When measuring power, use compute power by integrating the spectrum across the 99% OBW of the signal using the instrument's band-power measurement function, with band limits set equal to the OBW band edges. If the instrument does not have a band-power function, then sum the spectrum levels (in power units) at 1 MHz intervals extending across the 99% OBW of the spectrum.

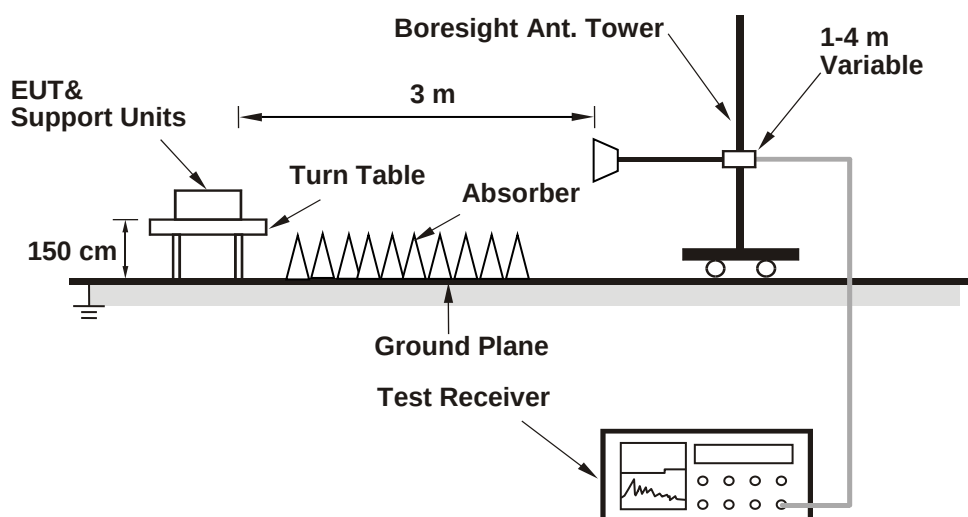
Method SA-2

- Measure the duty cycle D of the transmitter output signal.
- Set span to encompass the entire 99% OBW of the signal.
- Set RBW = 1 MHz, Set VBW $\geq$ 3 MHz, Detector = RMS
- Number of points in sweep $\geq [2 \times \text{span} / \text{RBW}]$. (This gives bin-to-bin spacing $\leq \text{RBW} / 2$, so that narrowband signals are not lost between frequency bins.)
- Sweep time = auto, trigger set to "free run".
- Trace average at least 100 traces in power averaging mode.
- Add $[10 \log (1 / D)]$, where D is the duty cycle.

Note: When measuring straddle channel power, use compute power by integrating the spectrum across the 99% OBW of the signal using the instrument's band power measurement function, with band limits set equal to the 99% OBW band edges. If the instrument does not have a band power function, then sum the spectrum levels (in power units) at 1 MHz intervals extending across the 99% OBW of the spectrum.

6.2 Maximum Power Spectral Density

6.2.1 Test Setup



6.2.2 Test Procedure

- The EUT was placed on the top of a rotating table 1.5 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- Perform a field strength measurement and record the worse read value, is the field strength value via a spectrum reading obtained corrected for antenna factor, cable loss and pre-amplifier factor and then mathematically convert the measured field strength level to EIRP level.
- Follow ANSI C63.10 section 12.7.3, EIRP Value (dBm) = Field Strength Value (dBuV/m) + Correction Factor @ 3 m.
- Correction Factor (dB) @ 3 m = $20 \log(D) - 104.77$; where D is the measurement distance @ 3 m = -95.23 dB

Spectrum analyzer setting as below:

Method SA-1

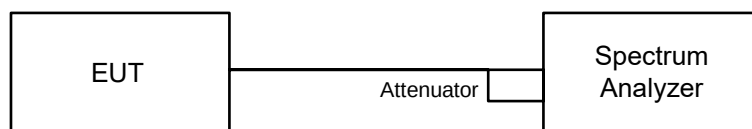
- a. Set span to encompass the entire 99% OBW of the signal.
- b. Set RBW = 1 MHz, Set VBW $\geq$ 3 MHz, Detector = RMS.
- c. Sweep points $\geq [2 \times \text{span} / \text{RBW}]$. (This gives bin-to-bin spacing $\leq \text{RBW} / 2$, so that narrowband signals are not lost between frequency bins.)
- d. Sweep time = auto, trigger set to “free run”.
- e. Trace average at least 100 traces in power averaging mode.
- f. Record the max value

Method SA-2

- a. Measure the duty cycle of the transmitter output signal.
- b. Set span to encompass the entire 99% OBW of the signal.
- c. Set RBW = 1 MHz, Set VBW $\geq$ 3 MHz, Detector = RMS.
- d. Number of points in sweep $\geq [2 \times \text{span} / \text{RBW}]$. (This gives bin-to-bin spacing $\leq \text{RBW} / 2$, so that narrowband signals are not lost between frequency bins.)
- e. Sweep time = auto, trigger set to “free run”.
- f. Trace average at least 100 traces in power averaging mode.
- g. Use the peak search function on the instrument to find the peak of the spectrum and record its value.
- h. Record the max value and add $10 \log (1/\text{duty cycle})$.

6.3 Emission Bandwidth

6.3.1 Test Setup

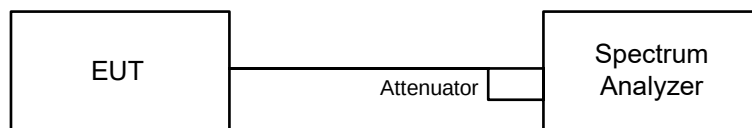


6.3.2 Test Procedure

- a. Set RBW = shall be in the range of 1% to 5% of the emission bandwidth.
- b. Set the VBW $>$ RBW.
- c. Detector = peak.
- d. Trace mode = max-hold.
- e. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the instrument. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is in the range of 1% to 5%.

6.4 In-Band Emission Mask

6.4.1 Test Setup

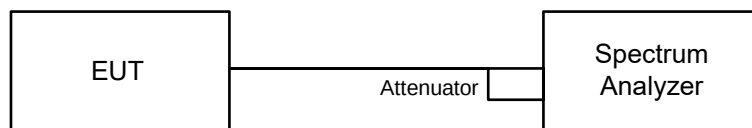


6.4.2 Test Procedure

- a. Connect output of the antenna port to a spectrum analyzer and adjust appropriate attenuation.
- b. Measure the 26 dB EBW using the test procedure 12.5.2 of ANSI C63.10-2020. (This will be used to determine the channel edge.)
- c. Measure the power spectral density (for emissions mask reference) using the following procedure:
 - a) Set the span to encompass the entire 26 dB EBW of the signal.
 - b) Set RBW = same RBW used for 26 dB EBW measurement.
 - c) Set VBW $\geq 3 \times$ RBW
 - d) Number of points in sweep $\geq [2 \times \text{span} / \text{RBW}]$.
 - e) Sweep time = auto.
 - f) Detector = RMS (i.e., power averaging)
 - g) Trace average at least 100 traces in power averaging (rms) mode.
 - h) Use the peak search function on the instrument to find the peak of the spectrum.
- d. Using the measuring equipment limit line function, develop the emissions mask based on the following requirements. The emissions power spectral density must be reduced below the peak power spectral density (in dB) as follows:
 - a) Suppressed by 20 dB at 1 MHz outside of the channel edge. (The channel edge is defined as the 26-dB point on either side of the carrier center frequency.)
 - b) Suppressed by 28 dB at one channel bandwidth from the channel center.
 - c) Suppressed by 40 dB at one- and one-half times the channel bandwidth from the channel center.
- e. Adjust the span to encompass the entire mask as necessary and clear trace.
- f. Trace average at least 100 traces in power averaging (rms) mode.
- g. Adjust the reference level as necessary so that the crest of the channel touches the top of the emission mask.

6.5 Occupied Bandwidth

6.5.1 Test Setup



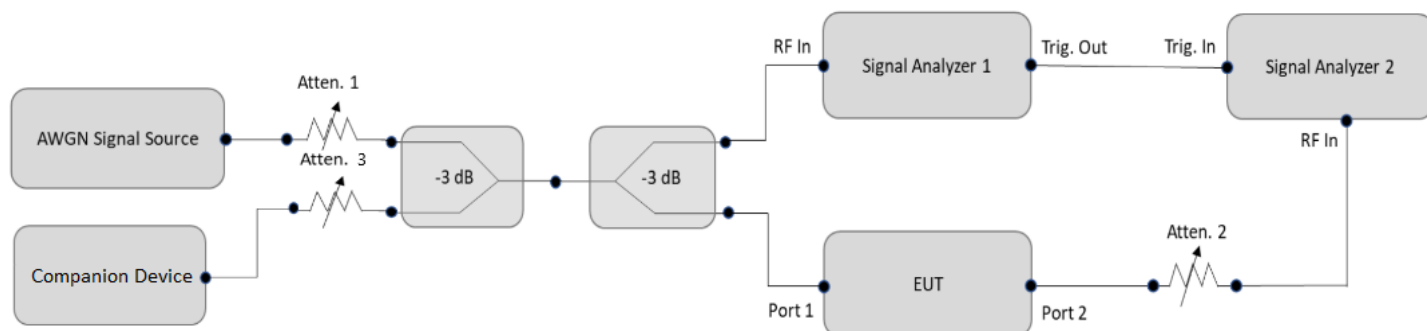
6.5.2 Test Procedure

The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission. The following procedure shall be used for measuring 99% power bandwidth:

- a. The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
- b. The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be at least three times the RBW, unless otherwise specified by the applicable requirement.
- c. Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than $[10 \log (\text{OBW}/\text{RBW})]$ below the reference level.
- d. Step a) through step c) might require iteration to adjust within the specified range.
- e. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max-hold mode (until the trace stabilizes) shall be used.
- f. Use the 99% power bandwidth function of the instrument and report the measured bandwidth.

6.6 Contention-based Protocol

6.6.1 Test Setup



6.6.2 Test Procedure

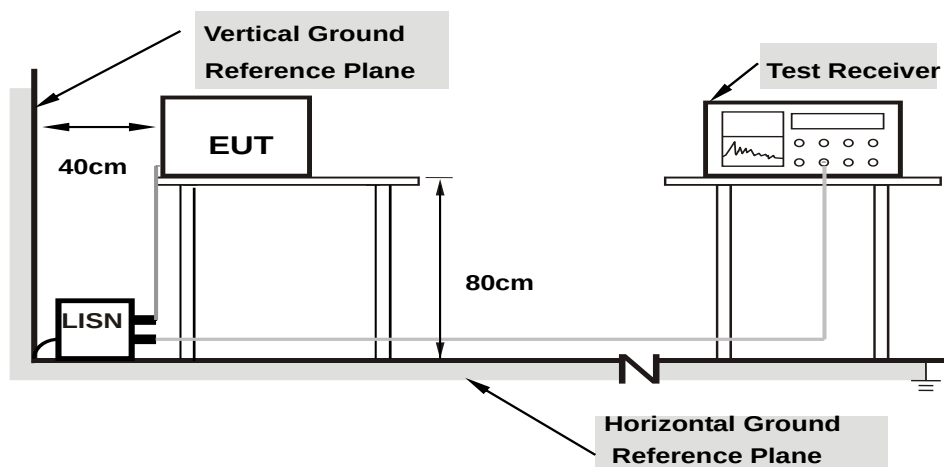
- Set the signal analyzer center frequency to the nominal EUT channel center frequency. The span range of the signal analyzer shall be between two times and five times the OBW of the EUT. Connect the output port of the EUT to the signal analyzer 2. Ensure that the attenuator 2 provides enough attenuation to not overload the signal analyzer 2 receiver.
- Monitoring the signal analyzer 2, verify the EUT is operating and transmitting with the parameters (set as following section 4.7.5 EUT operating condition).
- Determine number of times detection threshold test as following table,

If	Number of Tests	Placement of Incumbent Transmission
$BW_{EUT} \leq BW_{Inc}$	Once	Same as EUT transmission
$BW_{Inc} < BW_{EUT} \leq 2x BW_{Inc}$	Once	Contained within BW_{EUT}
$2x BW_{Inc} < BW_{EUT} \leq 4x BW_{Inc}$	Twice. (Incumbent transmission is contained within BW_{EUT})	Closely to the lower edge and upper edge of the EUT Channel
$BW_{EUT} > 4x BW_{Inc}$	Three times	Closely to the lower edge ,in the middle and upper edge of the EUT Channel

- The power measurement of AWGN signal refers to method SA-1 in section 12.4.2.2 of ANSI C63.10-2020.
- Using an AWGN signal source, generate (but do not transmit, i.e., RF OFF) a 10 MHz-wide AWGN signal. Use step c table to determine the center frequency of the 10 MHz AWGN signal relative to the EUT's channel bandwidth and center frequency.
- Set the AWGN signal power to an extremely low level (more than 20 dB below the -62 dBm threshold). Connect the AWGN signal source, via a 3-dB splitter, to the signal analyzer 1 and the EUT.
- Transmit the AWGN signal (RF ON) and verify its characteristics on the signal analyzer 1.
- Monitor the signal analyzer 2 to verify if the AWGN signal has been detected and the EUT has ceased transmission. If the EUT continues to transmit, then incrementally increase the AWGN signal power level until the EUT stops transmitting.
- (Including all losses in the RF paths) Determine and record the AWGN signal power level (at the EUT's antenna port) at which the EUT ceased transmission. Repeat the procedure at least 10 times to verify the EUT can detect an AWGN signal with 90% (or better) level of certainty.
- Refer to step c table to determine number of times the detection threshold testing needs to be repeated. If testing is required more than once, then go back to step d, choose a different center frequency for the AWGN signal and repeat the process.

6.7 AC Power Conducted Emissions

6.7.1 Test Setup



Note: 1.Support units were connected to second LISN.

For the actual test configuration, please refer to the attached file (Test Setup Photo).

6.7.2 Test Procedure

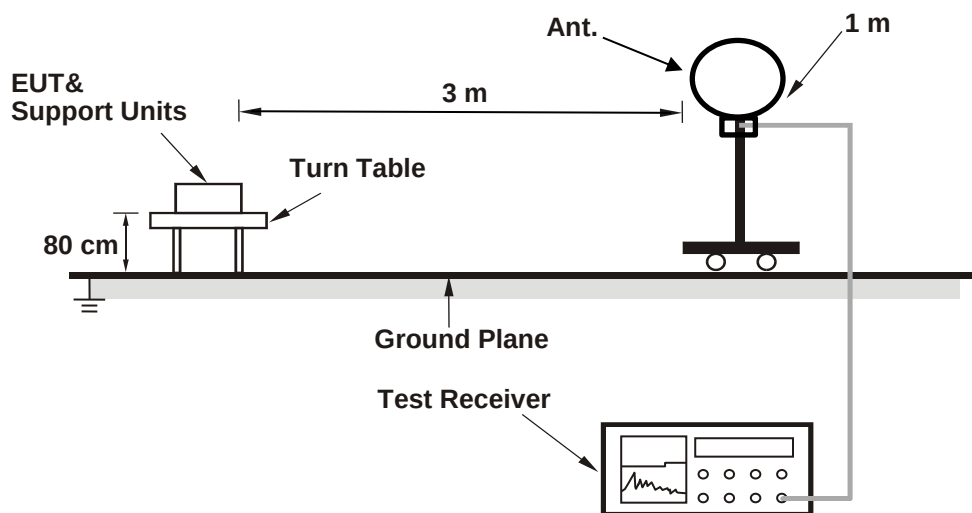
- Exploratory ac power-line conducted emission measurements: The EUT shall be operated on the mid channel and in the mode with highest output power unless the fundamental operates in the AC power-line emission test range then the EUT shall be operated in the range of typical modes of operation.
- The EUT was placed on a 0.8 meter to the top of table and placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50 uH of coupling impedance for the measuring instrument.
- Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- The frequency range from 150 kHz to 30 MHz was searched. Emission levels under (Limit – 20 dB) was not recorded.

Note: The resolution bandwidth and video bandwidth of test receiver is 9 kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15 MHz-30 MHz.

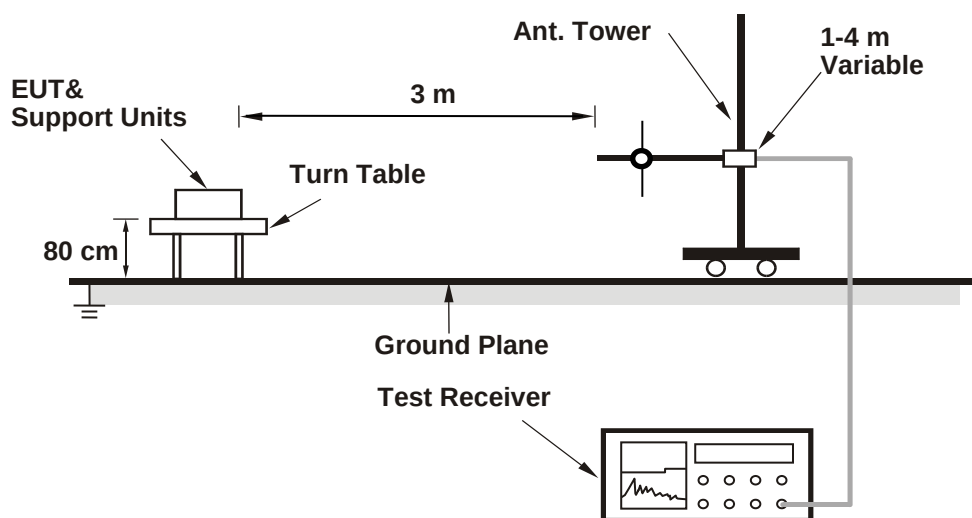
6.8 Unwanted Emissions below 1 GHz

6.8.1 Test Setup

For Radiated emission below 30 MHz



For Radiated emission above 30 MHz



For the actual test configuration, please refer to the attached file (Test Setup Photo).

6.8.2 Test Procedure

For Radiated emission below 30 MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode, except for the frequency band (9 kHz to 90 kHz and 110 kHz to 490 kHz) set to average detect function and peak detect function.

Notes:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 200 Hz at frequency below 150 kHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9 kHz or 10 kHz at frequency (150 kHz to 30 MHz).
3. All modes of operation were investigated and the worst-case emissions are reported.

For Radiated emission above 30 MHz

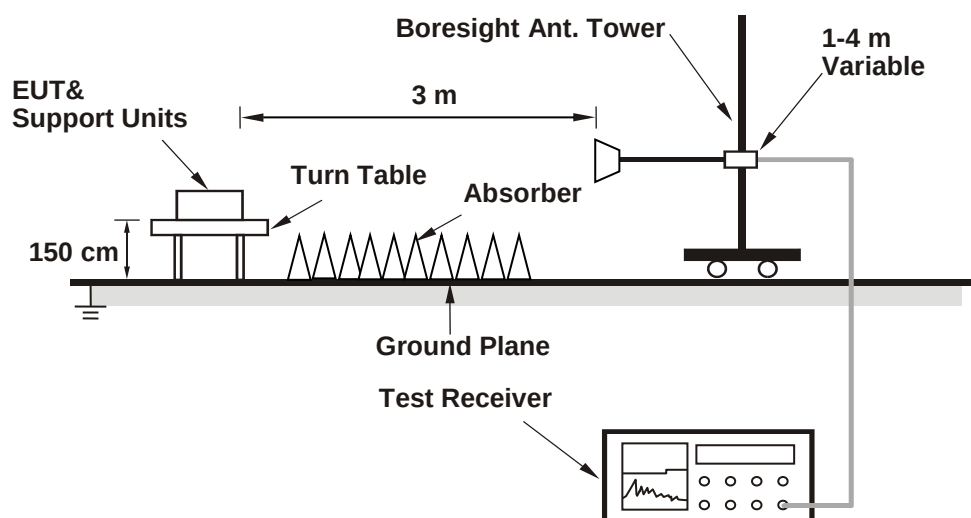
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Quasi-peak(QP) detect function, Average(AV) detect function, Peak(PK) detect function and specified bandwidth with maximum hold mode when the test frequencies less than or equal to 1 GHz.

Notes:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) at frequency below 1 GHz.
2. All modes of operation were investigated and the worst-case emissions are reported.

6.9 Unwanted Emissions above 1 GHz

6.9.1 Test Setup



For the actual test configuration, please refer to the attached file (Test Setup Photo).

6.9.2 Test Procedure

- The EUT was placed on the top of a rotating table 1.5 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The test-receiver system was set to peak and average detects function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Notes:

- The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) and Average detection (AV) at frequency above 1 GHz.
- For fundamental and harmonic signal measurement, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is $\geq 1/T$ (Duty cycle $< 98\%$) or 10 Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1 GHz.

For Integration method:

- For band edge measurement, the integration method is used, the resolution bandwidth of test spectrum analyzer is 100 kHz and the video bandwidth is 300 kHz. Please refer to the following for other instrument settings.
 - Using the detector RMS (power averaging) method, refer to ANSI C63.10 section 12.7.4.4 and 11.12.3.2, the Average value = Average Reading + Duty Cycle Correction Factor. For duty cycle correction factor values, see the Test Signal Duty Cycle section in this report.
- All modes of operation were investigated and the worst-case emissions are reported.

7 Test Results of Test Item

7.1 Maximum RF Output Power

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 62% RH	Tested By:	Chun Wu
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802.11a CDD

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
1	5955	109.70	-95.23	27.99	14.47	30	Pass
45	6175	109.30	-95.23	25.527	14.07	30	Pass
93	6415	109.60	-95.23	27.353	14.37	30	Pass
97	6435	109.50	-95.23	26.73	14.27	30	Pass
105	6475	109.60	-95.23	27.353	14.37	30	Pass
113	6515	109.70	-95.23	27.99	14.47	30	Pass
117	6535	109.40	-95.23	26.122	14.17	30	Pass
149	6695	109.50	-95.23	26.73	14.27	30	Pass
181	6855	109.60	-95.23	27.353	14.37	30	Pass
185	6875	109.50	-95.23	26.73	14.27	30	Pass
209	6995	109.70	-95.23	27.99	14.47	30	Pass
233	7115	104.30	-95.23	8.072	9.07	30	Pass

802.11be (EHT20) CDD

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
1	5955	110.20	-95.23	31.405	14.97	30	Pass
45	6175	109.60	-95.23	27.353	14.37	30	Pass
93	6415	109.90	-95.23	29.309	14.67	30	Pass
97	6435	110.10	-95.23	30.69	14.87	30	Pass
105	6475	109.90	-95.23	29.309	14.67	30	Pass
113	6515	110.10	-95.23	30.69	14.87	30	Pass
117	6535	110.00	-95.23	29.992	14.77	30	Pass
149	6695	109.60	-95.23	27.353	14.37	30	Pass
181	6855	110.00	-95.23	29.992	14.77	30	Pass
185	6875	109.70	-95.23	27.99	14.47	30	Pass
209	6995	110.20	-95.23	31.405	14.97	30	Pass
233	7115	102.50	-95.23	5.333	7.27	30	Pass

802.11be (EHT40) CDD

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
3	5965	112.80	-95.23	57.148	17.57	30	Pass
43	6165	112.40	-95.23	52.119	17.17	30	Pass
91	6405	112.90	-95.23	58.479	17.67	30	Pass
99	6445	113.00	-95.23	59.841	17.77	30	Pass
107	6485	112.60	-95.23	54.576	17.37	30	Pass
115	6525	112.60	-95.23	54.576	17.37	30	Pass
123	6565	112.50	-95.23	53.333	17.27	30	Pass
155	6725	112.40	-95.23	52.119	17.17	30	Pass
179	6845	112.70	-95.23	55.847	17.47	30	Pass
187	6885	112.60	-95.23	54.576	17.37	30	Pass
211	7005	112.30	-95.23	50.933	17.07	30	Pass
227	7085	112.80	-95.23	57.148	17.57	30	Pass

802.11be (EHT80) CDD

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
7	5985	115.60	-95.23	108.893	20.37	30	Pass
39	6145	115.50	-95.23	106.414	20.27	30	Pass
87	6385	115.80	-95.23	114.025	20.57	30	Pass
103	6465	115.60	-95.23	108.893	20.37	30	Pass
119	6545	115.60	-95.23	108.893	20.37	30	Pass
135	6625	115.50	-95.23	106.414	20.27	30	Pass
151	6705	115.30	-95.23	101.625	20.07	30	Pass
167	6785	115.50	-95.23	106.414	20.27	30	Pass
183	6865	115.70	-95.23	111.429	20.47	30	Pass
199	6945	115.50	-95.23	106.414	20.27	30	Pass
215	7025	115.40	-95.23	103.992	20.17	30	Pass

802.11be (EHT160) CDD

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
15	6025	118.00	-95.23	189.234	22.77	30	Pass
47	6185	117.90	-95.23	184.927	22.67	30	Pass
79	6345	118.20	-95.23	198.153	22.97	30	Pass
111	6505	118.10	-95.23	193.642	22.87	30	Pass
143	6665	118.20	-95.23	198.153	22.97	30	Pass
175	6825	117.90	-95.23	184.927	22.67	30	Pass
207	6985	118.00	-95.23	189.234	22.77	30	Pass

802.11be (EHT320) CDD

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
31	6105	120.40	-95.23	328.852	25.17	30	Pass
63	6265	120.40	-95.23	328.852	25.17	30	Pass
95	6425	120.50	-95.23	336.512	25.27	30	Pass
127	6585	120.50	-95.23	336.512	25.27	30	Pass
159	6745	119.80	-95.23	286.418	24.57	30	Pass
191	6905	119.60	-95.23	273.527	24.37	30	Pass

802.11be (EHT20) Beamforming

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
1	5955	112.10	-95.23	48.641	16.87	30	Pass
45	6175	111.30	-95.23	40.458	16.07	30	Pass
93	6415	111.50	-95.23	42.364	16.27	30	Pass
97	6435	111.60	-95.23	43.351	16.37	30	Pass
105	6475	112.00	-95.23	47.534	16.77	30	Pass
113	6515	111.90	-95.23	46.452	16.67	30	Pass
117	6535	112.00	-95.23	47.534	16.77	30	Pass
149	6695	112.10	-95.23	48.641	16.87	30	Pass
181	6855	112.10	-95.23	48.641	16.87	30	Pass
185	6875	112.00	-95.23	47.534	16.77	30	Pass
209	6995	111.60	-95.23	43.351	16.37	30	Pass
233	7115	100.60	-95.23	3.443	5.37	30	Pass

802.11be (EHT40) Beamforming

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
3	5965	114.10	-95.23	77.09	18.87	30	Pass
43	6165	113.70	-95.23	70.307	18.47	30	Pass
91	6405	113.60	-95.23	68.707	18.37	30	Pass
99	6445	113.70	-95.23	70.307	18.47	30	Pass
107	6485	114.00	-95.23	75.336	18.77	30	Pass
115	6525	113.80	-95.23	71.945	18.57	30	Pass
123	6565	113.70	-95.23	70.307	18.47	30	Pass
155	6725	113.90	-95.23	73.621	18.67	30	Pass
179	6845	114.00	-95.23	75.336	18.77	30	Pass
187	6885	114.00	-95.23	75.336	18.77	30	Pass
211	7005	113.70	-95.23	70.307	18.47	30	Pass
227	7085	113.80	-95.23	71.945	18.57	30	Pass

802.11be (EHT80) Beamforming

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
7	5985	117.10	-95.23	153.815	21.87	30	Pass
39	6145	116.80	-95.23	143.549	21.57	30	Pass
87	6385	116.40	-95.23	130.918	21.17	30	Pass
103	6465	116.50	-95.23	133.968	21.27	30	Pass
119	6545	116.40	-95.23	130.918	21.17	30	Pass
135	6625	116.70	-95.23	140.281	21.47	30	Pass
151	6705	116.80	-95.23	143.549	21.57	30	Pass
167	6785	116.40	-95.23	130.918	21.17	30	Pass
183	6865	116.40	-95.23	130.918	21.17	30	Pass
199	6945	116.70	-95.23	140.281	21.47	30	Pass
215	7025	116.80	-95.23	143.549	21.57	30	Pass

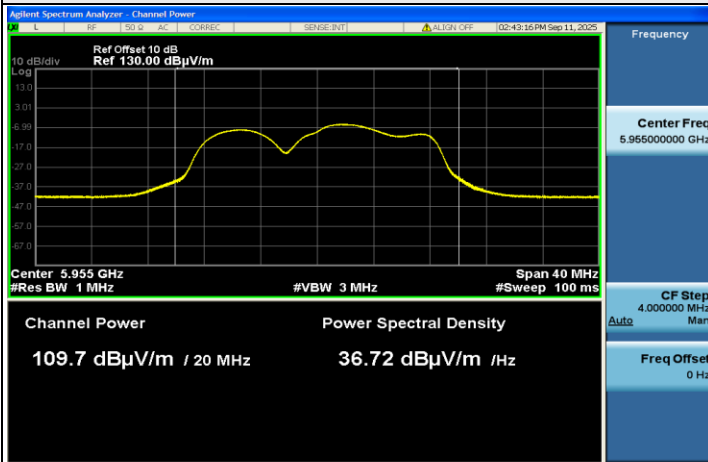
802.11be (EHT160) Beamforming

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
15	6025	118.70	-95.23	222.331	23.47	30	Pass
47	6185	118.90	-95.23	232.809	23.67	30	Pass
79	6345	118.50	-95.23	212.324	23.27	30	Pass
111	6505	118.80	-95.23	227.51	23.57	30	Pass
143	6665	119.00	-95.23	238.232	23.77	30	Pass
175	6825	119.20	-95.23	249.459	23.97	30	Pass
207	6985	119.00	-95.23	238.232	23.77	30	Pass

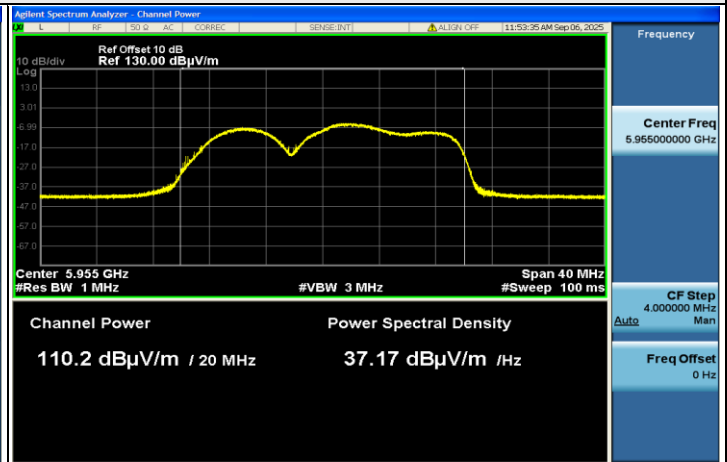
802.11be (EHT320) Beamforming

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
31	6105	119.70	-95.23	279.898	24.47	30	Pass
63	6265	119.60	-95.23	273.527	24.37	30	Pass
95	6425	119.90	-95.23	293.089	24.67	30	Pass
127	6585	119.50	-95.23	267.301	24.27	30	Pass
159	6745	120.00	-95.23	299.916	24.77	30	Pass
191	6905	119.60	-95.23	273.527	24.37	30	Pass

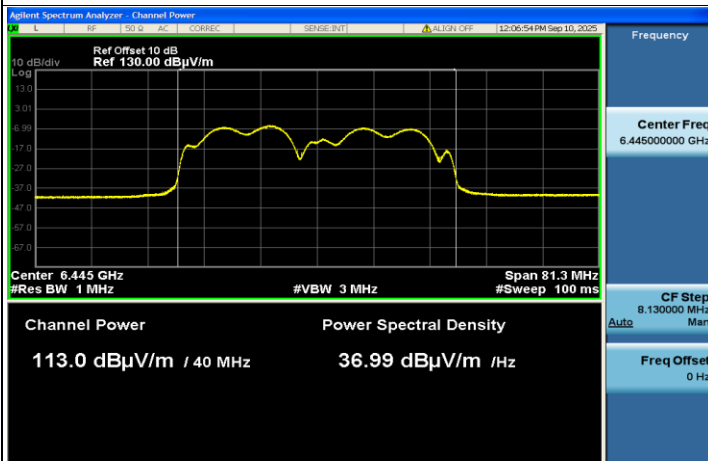
Spectrum Plot of Maximum Value



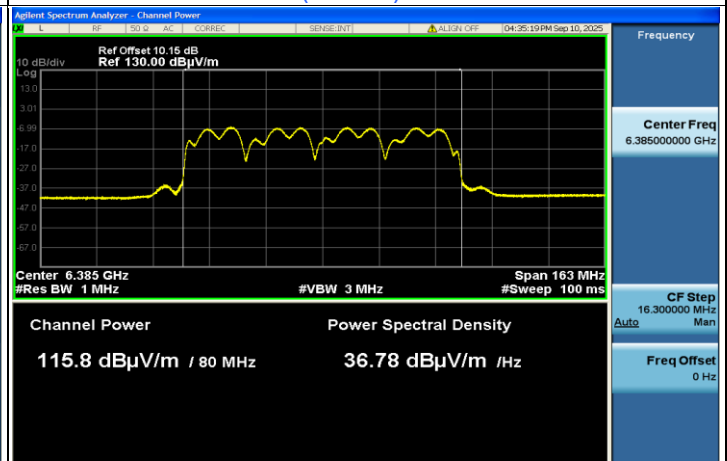
802.11a CDD : CH 1



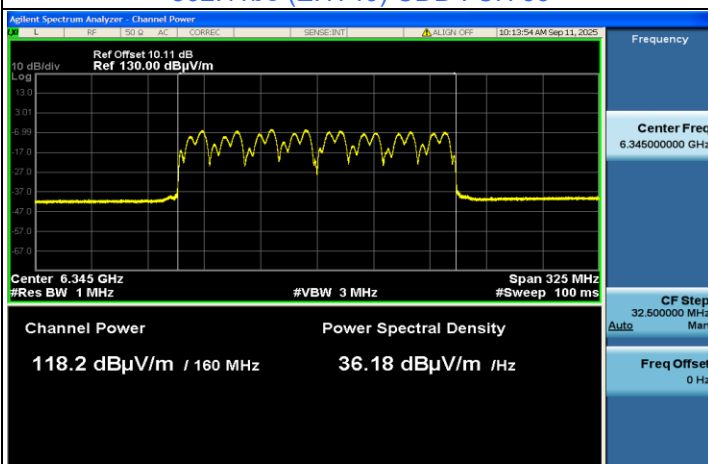
802.11be (EHT20) CDD : CH 1



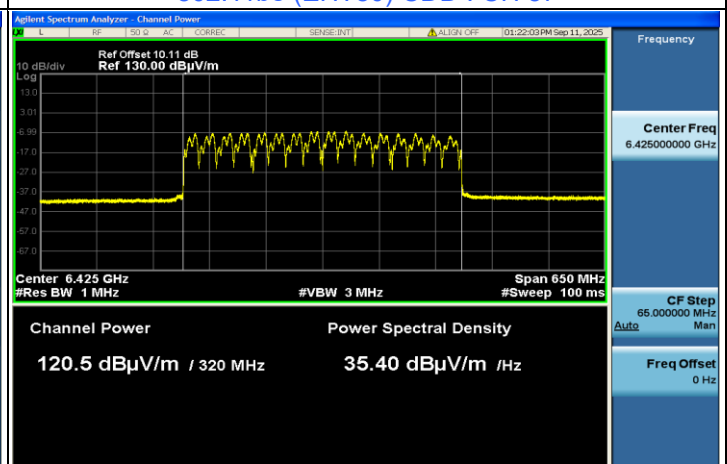
802.11be (EHT40) CDD : CH 99



802.11be (EHT80) CDD : CH 87

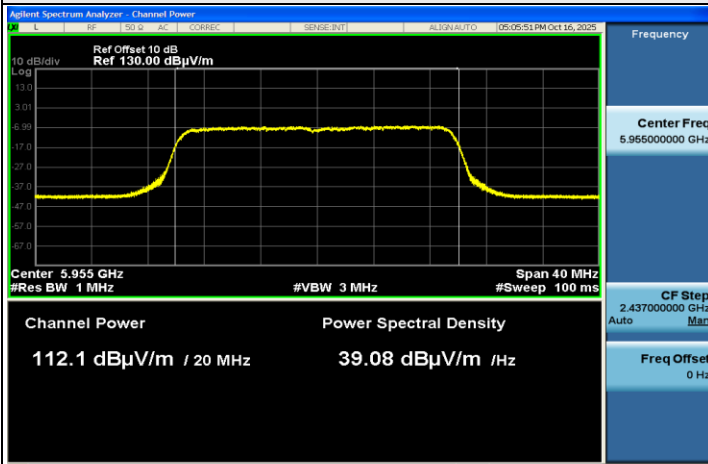


802.11be (EHT160) CDD : CH 79

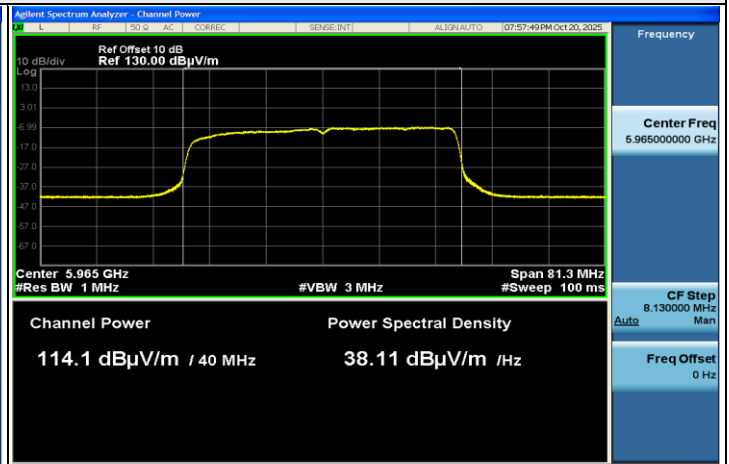


802.11be (EHT320) CDD : CH 95

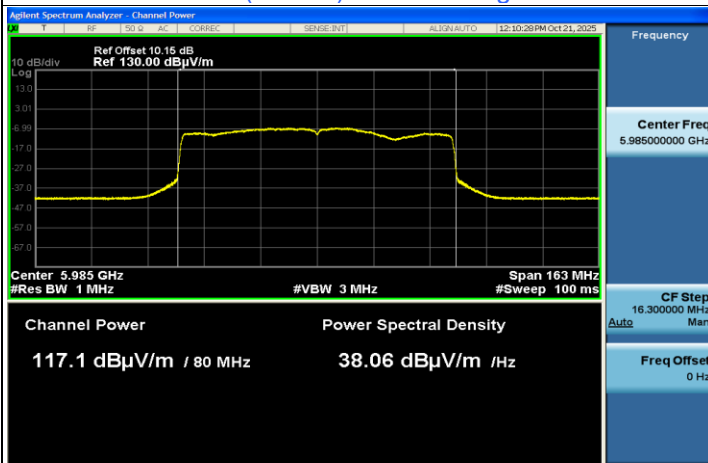
Spectrum Plot of Maximum Value



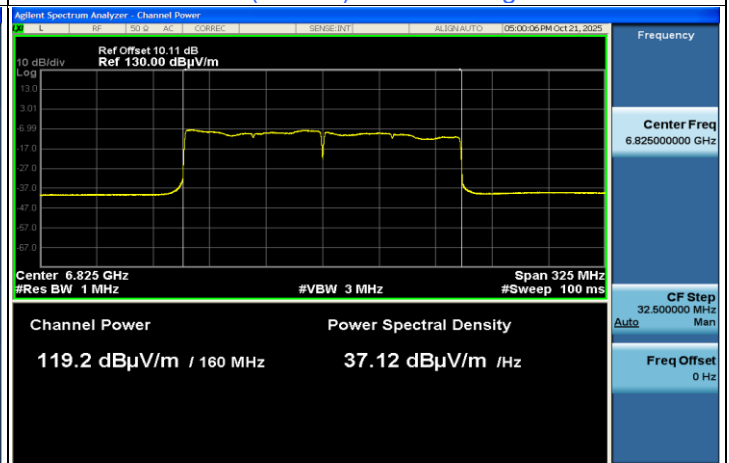
802.11be (EHT20) Beamforming : CH 1



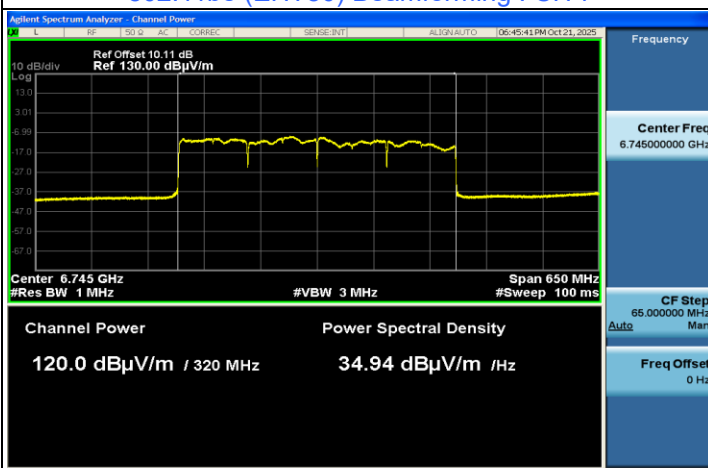
802.11be (EHT40) Beamforming : CH 3



802.11be (EHT80) Beamforming : CH 7



802.11be (EHT160) Beamforming : CH 175



802.11be (EHT320) Beamforming : CH 159

7.2 Maximum Power Spectral Density

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 62% RH	Tested By:	Chun Wu
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802.11a CDD

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
1	5955	100.18	-95.23	4.95	5	Pass
45	6175	100.14	-95.23	4.91	5	Pass
93	6415	100.16	-95.23	4.93	5	Pass
97	6435	100.18	-95.23	4.95	5	Pass
105	6475	100.19	-95.23	4.96	5	Pass
113	6515	100.14	-95.23	4.91	5	Pass
117	6535	100.19	-95.23	4.96	5	Pass
149	6695	100.14	-95.23	4.91	5	Pass
181	6855	100.18	-95.23	4.95	5	Pass
185	6875	100.19	-95.23	4.96	5	Pass
209	6995	100.16	-95.23	4.93	5	Pass
233	7115	96.02	-95.23	0.79	5	Pass

802.11be (EHT20) CDD

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
1	5955	100.09	-95.23	4.86	5	Pass
45	6175	100.21	-95.23	4.98	5	Pass
93	6415	100.14	-95.23	4.91	5	Pass
97	6435	100.19	-95.23	4.96	5	Pass
105	6475	100.20	-95.23	4.97	5	Pass
113	6515	100.17	-95.23	4.94	5	Pass
117	6535	100.20	-95.23	4.97	5	Pass
149	6695	100.20	-95.23	4.97	5	Pass
181	6855	100.21	-95.23	4.98	5	Pass
185	6875	100.20	-95.23	4.97	5	Pass
209	6995	100.18	-95.23	4.95	5	Pass
233	7115	93.11	-95.23	-2.12	5	Pass

802.11be (EHT40) CDD

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
3	5965	100.19	-95.23	4.96	5	Pass
43	6165	100.17	-95.23	4.94	5	Pass
91	6405	100.19	-95.23	4.96	5	Pass
99	6445	100.19	-95.23	4.96	5	Pass
107	6485	100.20	-95.23	4.97	5	Pass
115	6525	100.13	-95.23	4.90	5	Pass
123	6565	100.05	-95.23	4.82	5	Pass
155	6725	100.18	-95.23	4.95	5	Pass
179	6845	100.19	-95.23	4.96	5	Pass
187	6885	100.20	-95.23	4.97	5	Pass
211	7005	100.19	-95.23	4.96	5	Pass
227	7085	100.22	-95.23	4.99	5	Pass

802.11be (EHT80) CDD

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	Duty Factor (dB)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
7	5985	100.00	-95.23	0.15	4.92	5	Pass
39	6145	100.05	-95.23	0.15	4.97	5	Pass
87	6385	100.04	-95.23	0.15	4.96	5	Pass
103	6465	100.06	-95.23	0.15	4.98	5	Pass
119	6545	100.03	-95.23	0.15	4.95	5	Pass
135	6625	99.97	-95.23	0.15	4.89	5	Pass
151	6705	99.99	-95.23	0.15	4.91	5	Pass
167	6785	100.03	-95.23	0.15	4.95	5	Pass
183	6865	100.04	-95.23	0.15	4.96	5	Pass
199	6945	100.05	-95.23	0.15	4.97	5	Pass
215	7025	100.04	-95.23	0.15	4.96	5	Pass

802.11be (EHT160) CDD

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	Duty Factor (dB)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
15	6025	100.10	-95.23	0.11	4.98	5	Pass
47	6185	100.09	-95.23	0.11	4.97	5	Pass
79	6345	100.09	-95.23	0.11	4.97	5	Pass
111	6505	100.06	-95.23	0.11	4.94	5	Pass
143	6665	100.09	-95.23	0.11	4.97	5	Pass
175	6825	100.09	-95.23	0.11	4.97	5	Pass
207	6985	100.05	-95.23	0.11	4.93	5	Pass

802.11be (EHT320) CDD

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	Duty Factor (dB)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
31	6105	100.07	-95.23	0.11	4.95	5	Pass
63	6265	100.09	-95.23	0.11	4.97	5	Pass
95	6425	100.09	-95.23	0.11	4.97	5	Pass
127	6585	100.10	-95.23	0.11	4.98	5	Pass
159	6745	99.08	-95.23	0.11	3.96	5	Pass
191	6905	98.59	-95.23	0.11	3.47	5	Pass

802.11be (EHT20) Beamforming

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
1	5955	100.20	-95.23	4.97	5	Pass
45	6175	100.17	-95.23	4.94	5	Pass
93	6415	100.14	-95.23	4.91	5	Pass
97	6435	100.17	-95.23	4.94	5	Pass
105	6475	100.15	-95.23	4.92	5	Pass
113	6515	100.19	-95.23	4.96	5	Pass
117	6535	100.16	-95.23	4.93	5	Pass
149	6695	100.15	-95.23	4.92	5	Pass
181	6855	100.17	-95.23	4.94	5	Pass
185	6875	100.13	-95.23	4.90	5	Pass
209	6995	100.15	-95.23	4.92	5	Pass
233	7115	89.42	-95.23	-5.81	5	Pass

802.11be (EHT40) Beamforming

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
3	5965	100.19	-95.23	4.96	5	Pass
43	6165	100.10	-95.23	4.87	5	Pass
91	6405	100.13	-95.23	4.90	5	Pass
99	6445	100.17	-95.23	4.94	5	Pass
107	6485	100.15	-95.23	4.92	5	Pass
115	6525	100.15	-95.23	4.92	5	Pass
123	6565	100.18	-95.23	4.95	5	Pass
155	6725	100.17	-95.23	4.94	5	Pass
179	6845	100.10	-95.23	4.87	5	Pass
187	6885	100.18	-95.23	4.95	5	Pass
211	7005	100.08	-95.23	4.85	5	Pass
227	7085	100.16	-95.23	4.93	5	Pass

802.11be (EHT80) Beamforming

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	Duty Factor (dB)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
7	5985	100.01	-95.23	0.15	4.93	5	Pass
39	6145	100.03	-95.23	0.15	4.95	5	Pass
87	6385	99.96	-95.23	0.15	4.88	5	Pass
103	6465	99.97	-95.23	0.15	4.89	5	Pass
119	6545	100.02	-95.23	0.15	4.94	5	Pass
135	6625	100.01	-95.23	0.15	4.93	5	Pass
151	6705	99.97	-95.23	0.15	4.89	5	Pass
167	6785	100.01	-95.23	0.15	4.93	5	Pass
183	6865	99.94	-95.23	0.15	4.86	5	Pass
199	6945	99.99	-95.23	0.15	4.91	5	Pass
215	7025	100.06	-95.23	0.15	4.98	5	Pass

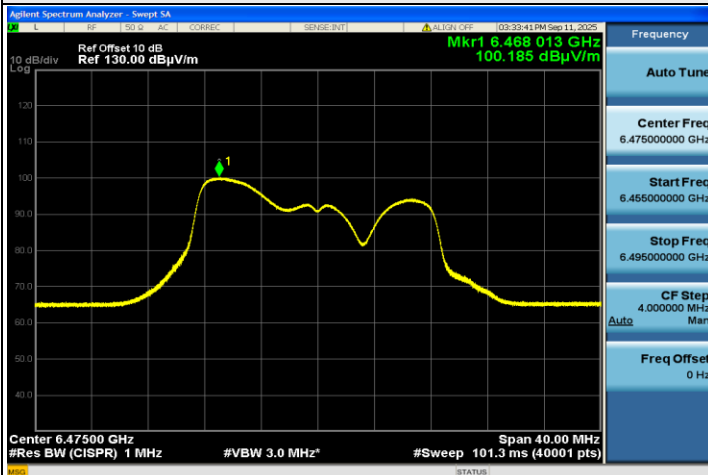
802.11be (EHT160) Beamforming

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	Duty Factor (dB)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
15	6025	99.95	-95.23	0.11	4.83	5	Pass
47	6185	100.02	-95.23	0.11	4.90	5	Pass
79	6345	99.97	-95.23	0.11	4.85	5	Pass
111	6505	99.94	-95.23	0.11	4.82	5	Pass
143	6665	99.95	-95.23	0.11	4.83	5	Pass
175	6825	99.99	-95.23	0.11	4.87	5	Pass
207	6985	99.99	-95.23	0.11	4.87	5	Pass

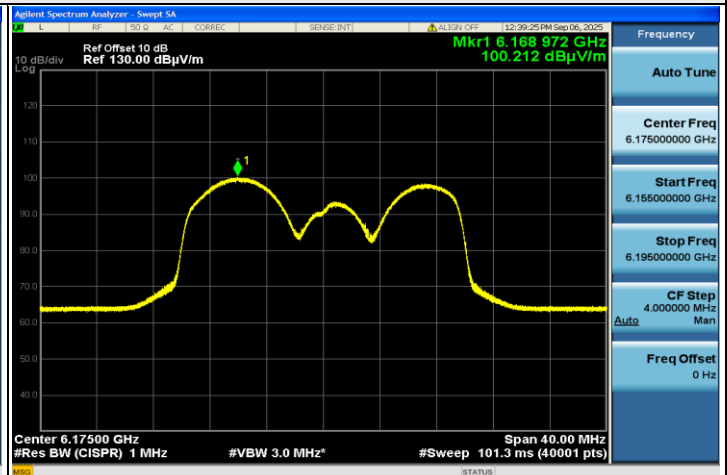
802.11be (EHT320) Beamforming

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	Duty Factor (dB)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
31	6105	97.50	-95.23	0.11	2.38	5	Pass
63	6265	97.60	-95.23	0.11	2.48	5	Pass
95	6425	98.32	-95.23	0.11	3.20	5	Pass
127	6585	98.40	-95.23	0.11	3.28	5	Pass
159	6745	98.32	-95.23	0.11	3.20	5	Pass
191	6905	98.49	-95.23	0.11	3.37	5	Pass

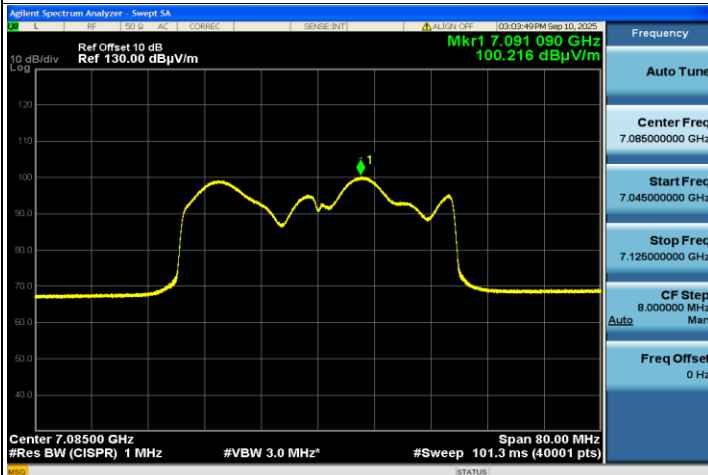
Spectrum Plot of Maximum Value



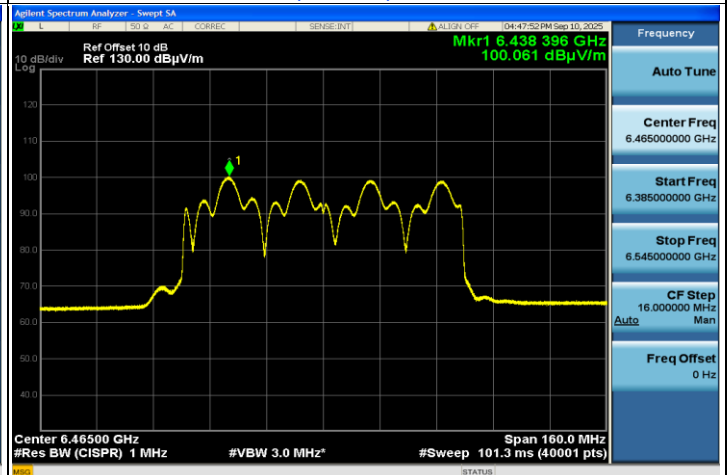
802.11a CDD : CH 105



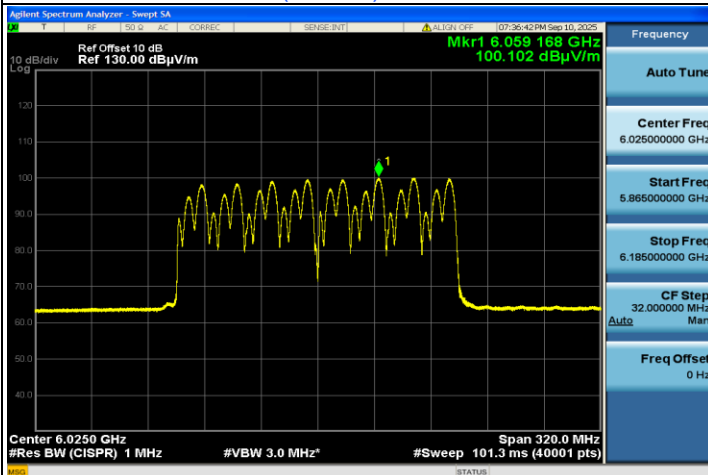
802.11be (EHT20) CDD : CH 45



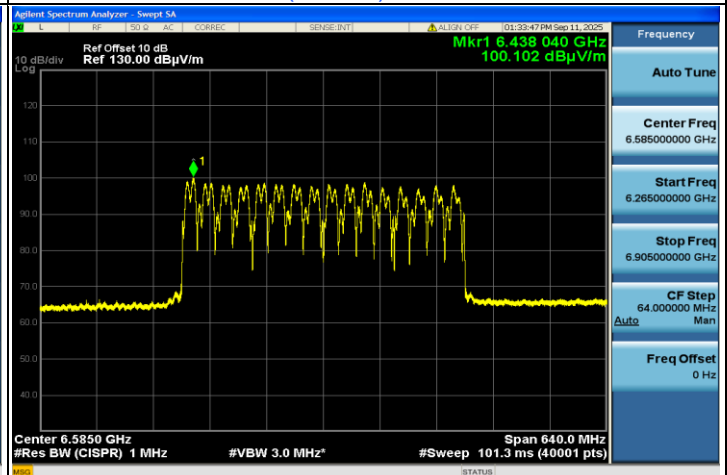
802.11be (EHT40) CDD : CH 227



802.11be (EHT80) CDD : CH 103

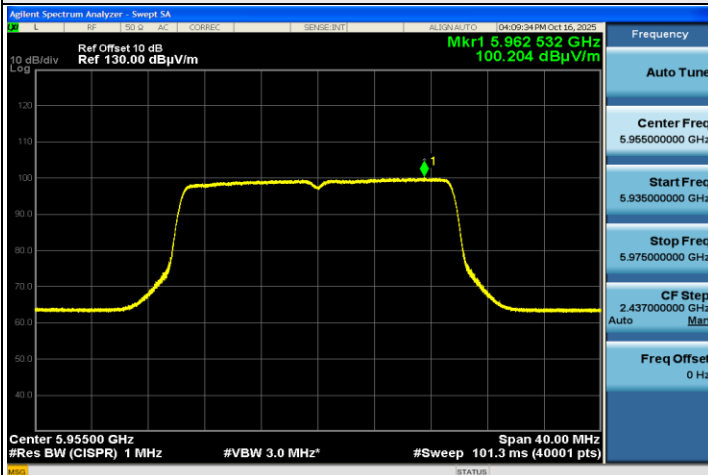


802.11be (EHT160) CDD : CH 15

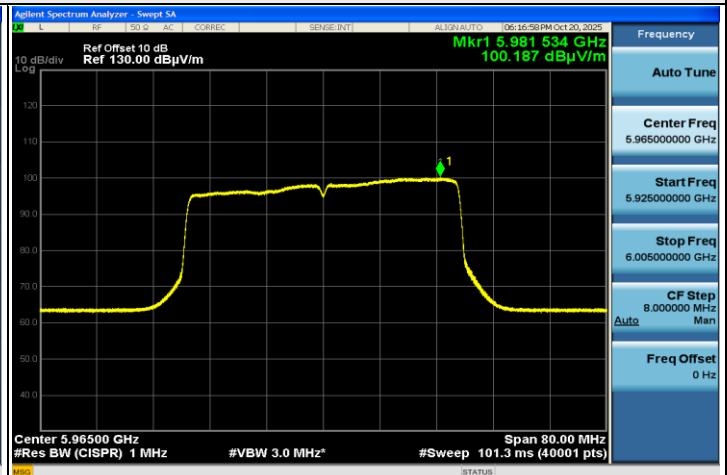


802.11be (EHT320) CDD : CH 127

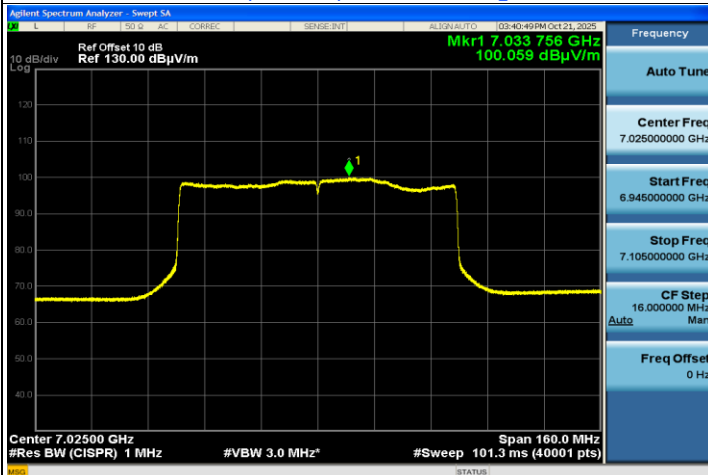
Spectrum Plot of Maximum Value



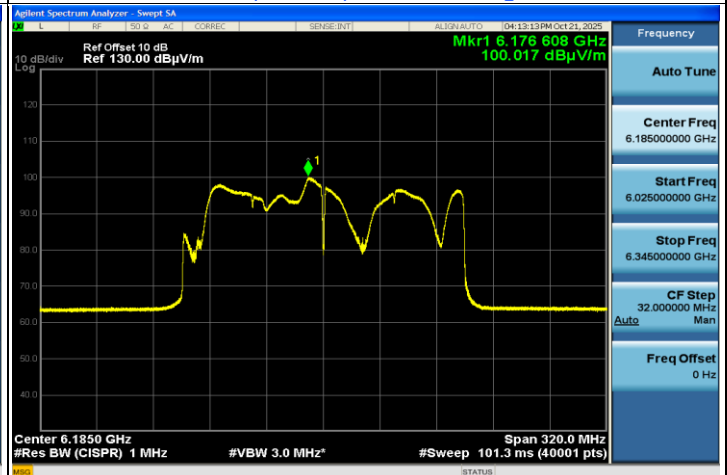
802.11be (EHT20) Beamforming : CH 1



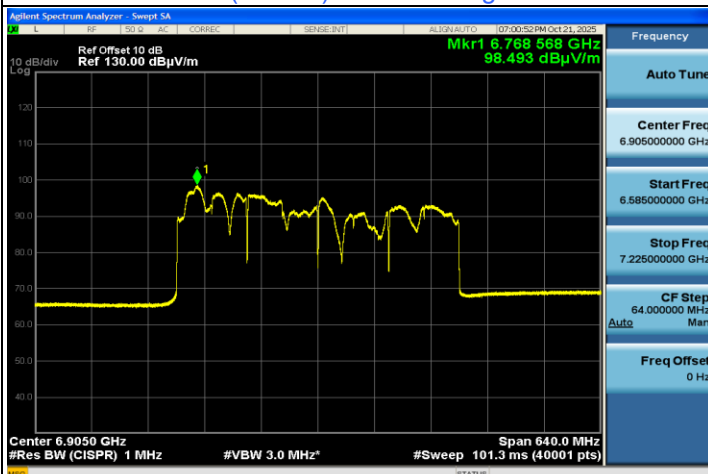
802.11be (EHT40) Beamforming : CH 3



802.11be (EHT80) Beamforming : CH 215



802.11be (EHT160) Beamforming : CH 47



802.11be (EHT320) Beamforming : CH 191

7.3 Emission Bandwidth

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 62% RH	Tested By:	Chun Wu
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802.11a

Channel	Frequency (MHz)	26dB Bandwidth (MHz)				Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
1	5955	22.97	22.88	22.36	22.48	320	Pass
45	6175	22.30	22.93	23.02	22.57	320	Pass
93	6415	22.64	22.87	22.92	22.29	320	Pass
97	6435	22.58	22.77	22.40	22.63	320	Pass
105	6475	22.41	22.83	23.12	22.61	320	Pass
113	6515	22.49	22.84	22.96	22.48	320	Pass
117	6535	22.63	22.52	22.98	22.44	320	Pass
149	6695	22.33	22.54	22.92	22.66	320	Pass
181	6855	22.44	22.83	22.44	22.66	320	Pass
185	6875	22.36	22.57	23.18	22.56	320	Pass
209	6995	22.66	22.88	23.00	22.28	320	Pass
233	7115	22.57	22.88	22.94	22.52	320	Pass

802.11be (EHT20)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)				Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
1	5955	23.17	22.74	23.49	23.63	320	Pass
45	6175	23.04	23.20	23.82	23.37	320	Pass
93	6415	23.25	23.09	23.21	23.46	320	Pass
97	6435	22.85	23.34	23.55	24.10	320	Pass
105	6475	23.00	22.95	23.76	24.72	320	Pass
113	6515	22.68	23.07	24.40	24.21	320	Pass
117	6535	22.76	22.92	23.57	23.67	320	Pass
149	6695	22.93	23.08	23.94	23.71	320	Pass
181	6855	23.22	23.22	23.45	23.83	320	Pass
185	6875	22.91	23.25	22.89	24.09	320	Pass
209	6995	22.83	23.26	23.19	23.21	320	Pass
233	7115	22.66	23.17	22.88	23.97	320	Pass

802.11be (EHT40)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)				Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
3	5965	44.13	42.92	43.41	43.45	320	Pass
43	6165	44.32	43.49	43.99	43.56	320	Pass
91	6405	45.01	44.03	44.74	43.91	320	Pass
99	6445	44.19	45.78	43.60	43.71	320	Pass
107	6485	44.38	43.87	43.91	43.64	320	Pass
115	6525	44.18	43.47	44.61	43.76	320	Pass
123	6565	43.85	44.45	43.78	44.27	320	Pass
155	6725	43.91	44.72	43.95	44.03	320	Pass
179	6845	44.32	43.97	45.55	43.33	320	Pass
187	6885	44.55	44.77	43.41	44.33	320	Pass
211	7005	44.04	43.86	43.36	43.84	320	Pass
227	7085	44.15	43.60	44.68	43.52	320	Pass

802.11be (EHT80)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)				Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
7	5985	88.91	88.26	89.40	88.27	320	Pass
39	6145	87.58	89.78	89.42	90.10	320	Pass
87	6385	88.87	89.70	89.24	88.55	320	Pass
103	6465	89.90	89.92	88.28	88.60	320	Pass
119	6545	89.73	90.63	89.77	88.78	320	Pass
135	6625	88.19	87.70	88.23	87.58	320	Pass
151	6705	88.06	87.70	89.45	88.58	320	Pass
167	6785	86.80	90.41	88.13	88.80	320	Pass
183	6865	87.09	90.94	90.14	86.57	320	Pass
199	6945	88.51	90.45	90.41	87.54	320	Pass
215	7025	89.91	87.97	88.85	88.03	320	Pass

802.11be (EHT160)

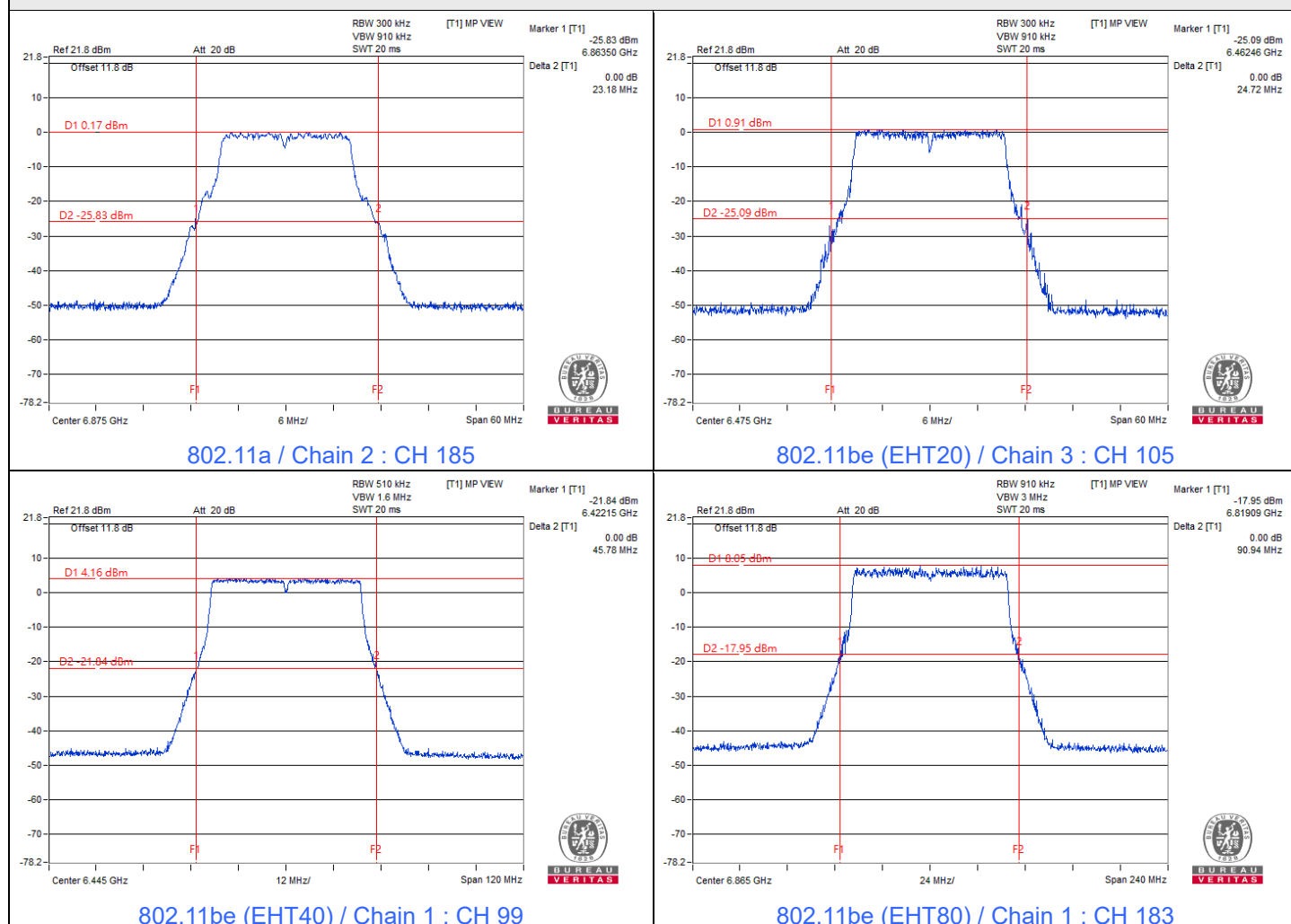
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
15	6025	172.27	171.92	170.14	172.09	320	Pass
47	6185	171.98	173.22	171.15	173.19	320	Pass
79	6345	174.08	171.36	170.68	173.66	320	Pass
111	6505	176.04	173.37	170.66	171.64	320	Pass
143	6665	175.16	173.01	171.52	172.84	320	Pass
175	6825	174.24	172.02	172.51	171.94	320	Pass
207	6985	174.60	170.95	170.91	172.03	320	Pass

802.11be (EHT320)

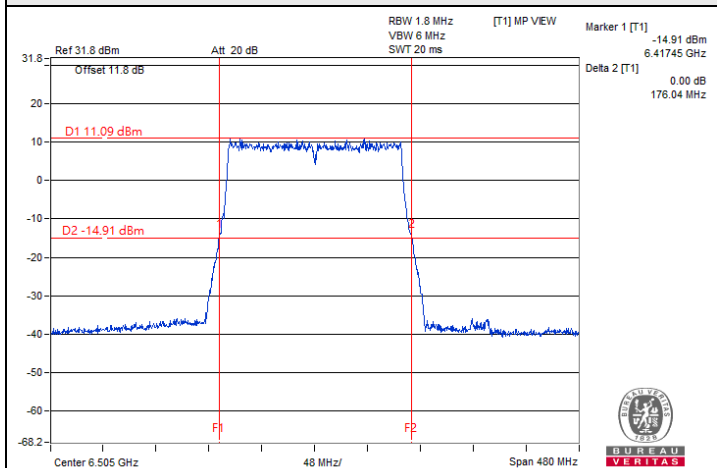
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
31	6105	337.70	337.98	337.62	336.76	320	Note
63	6265	337.59	339.47	340.14	339.20	320	Note
95	6425	366.86	340.56	341.31	339.37	320	Note
127	6585	340.90	341.29	335.40	337.60	320	Note
159	6745	339.15	341.45	339.28	339.31	320	Note
191	6905	342.83	467.34	467.41	621.27	320	Note

Note: For channels with a nominal bandwidth of 320 MHz, compliance is demonstrated by way of the 99% BW.

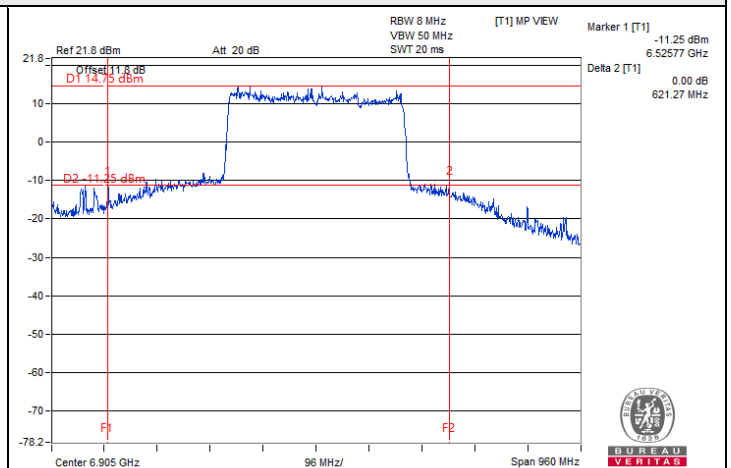
Spectrum Plot of Maximum Value



Spectrum Plot of Maximum Value



802.11be (EHT160) / Chain 0 : CH 111

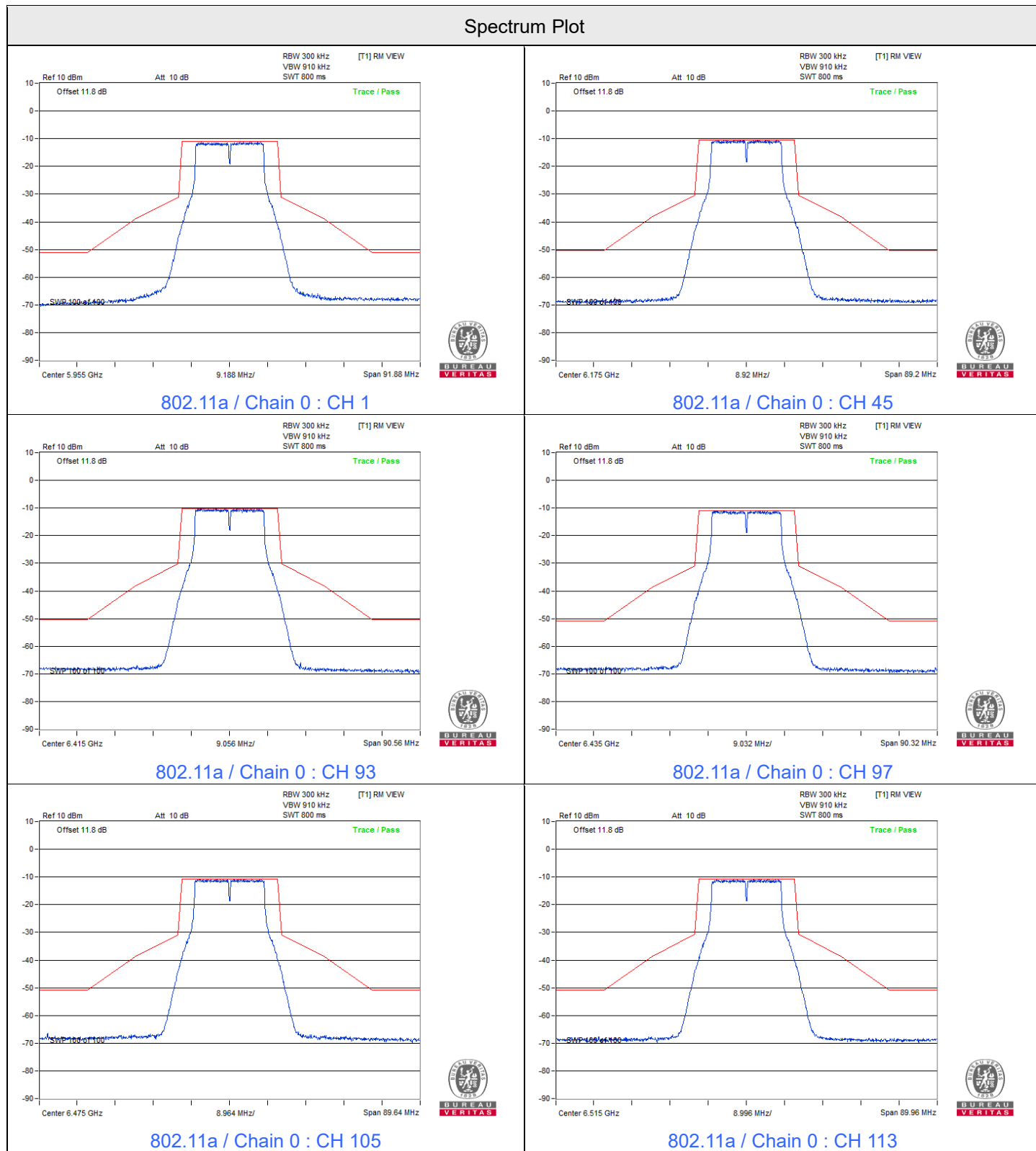


802.11be (EHT320) / Chain 3 : CH 191

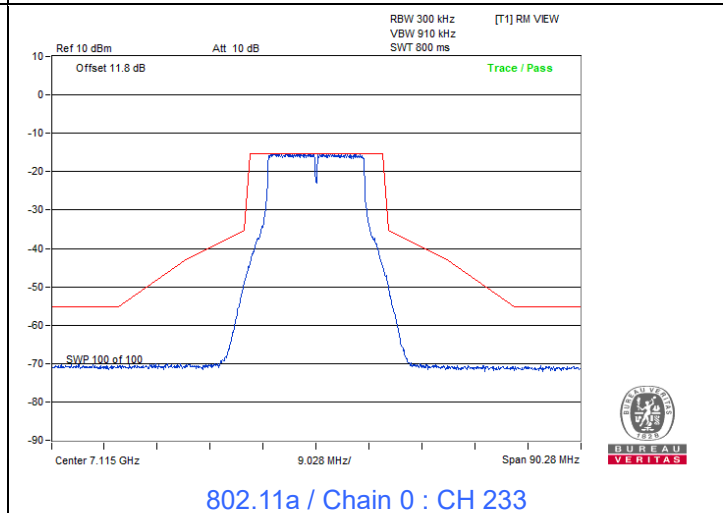
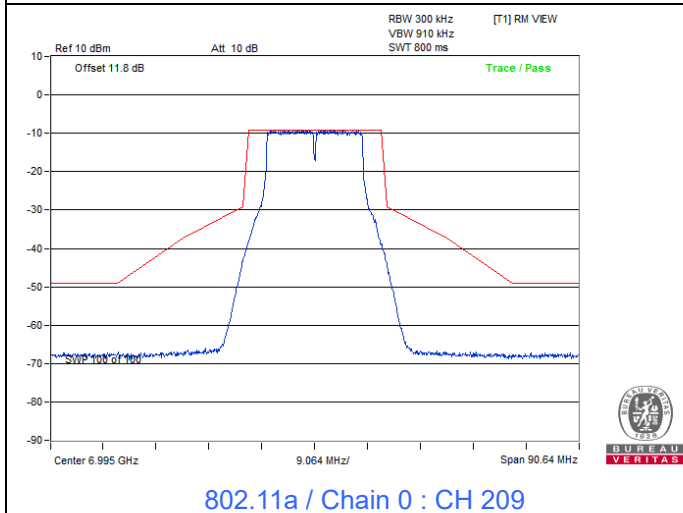
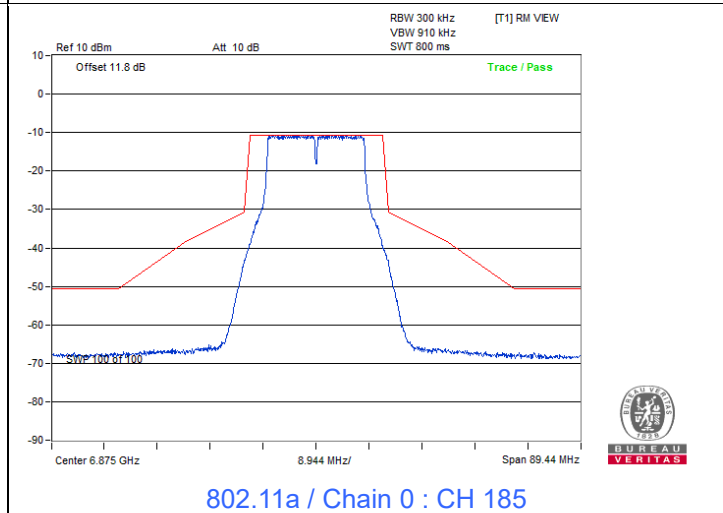
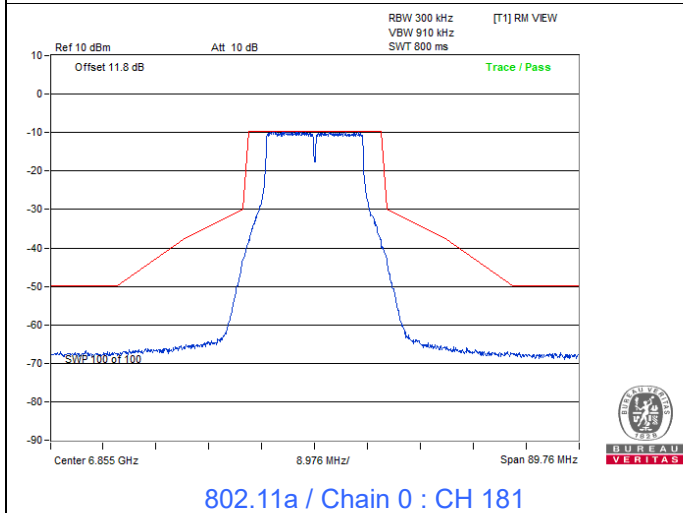
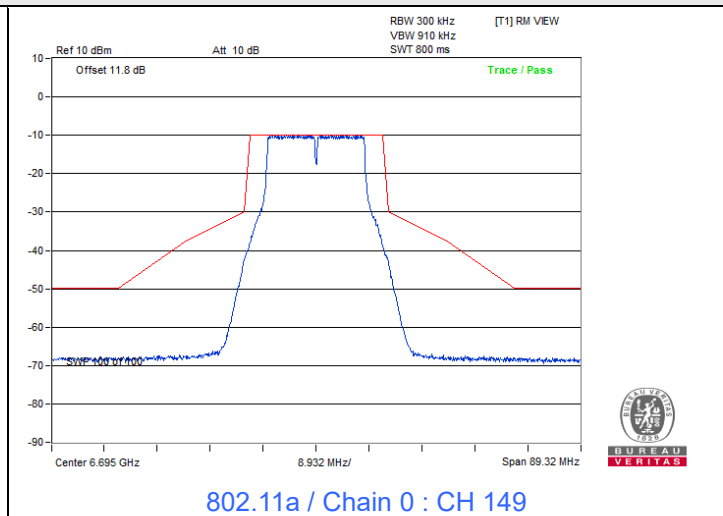
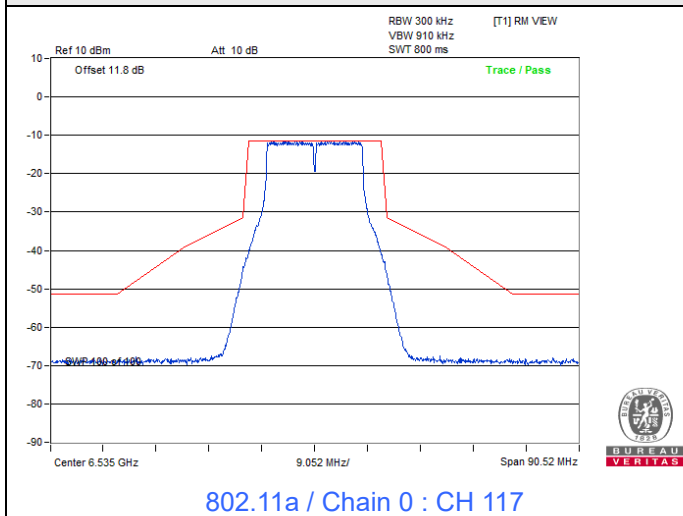
7.4 In-Band Emission Mask

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 62% RH	Tested By:	Chun Wu
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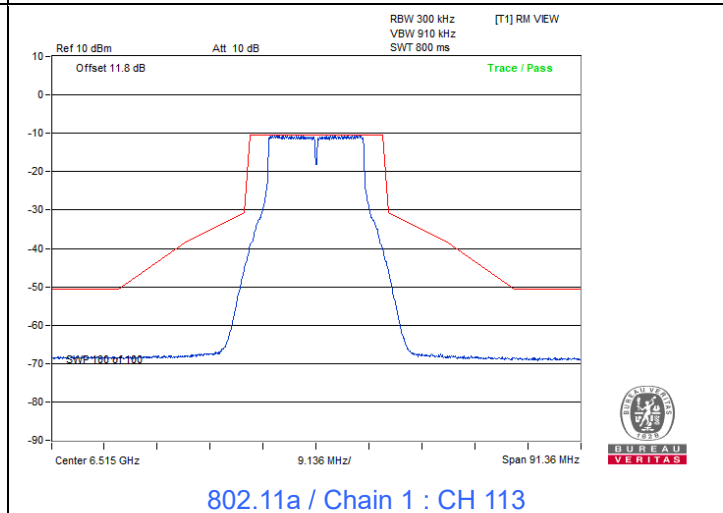
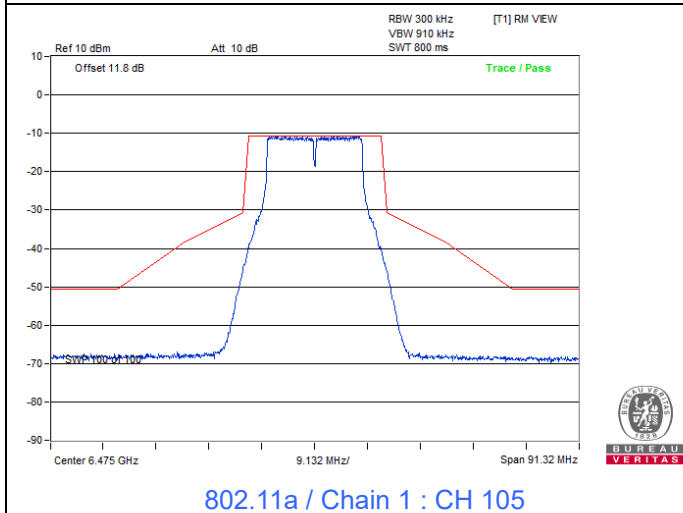
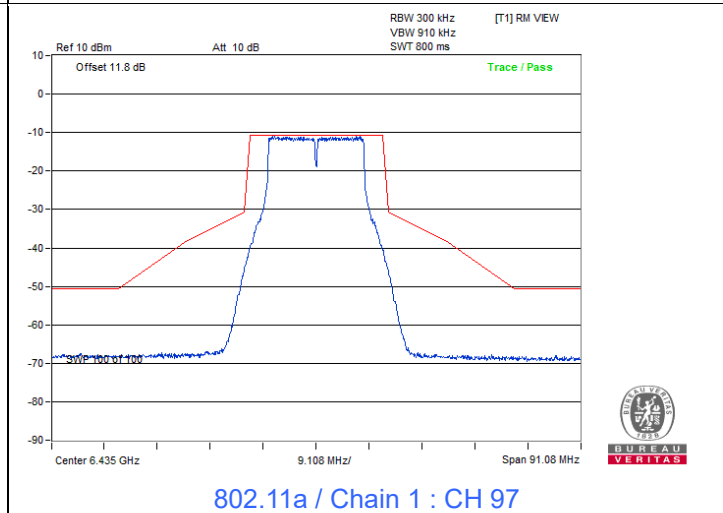
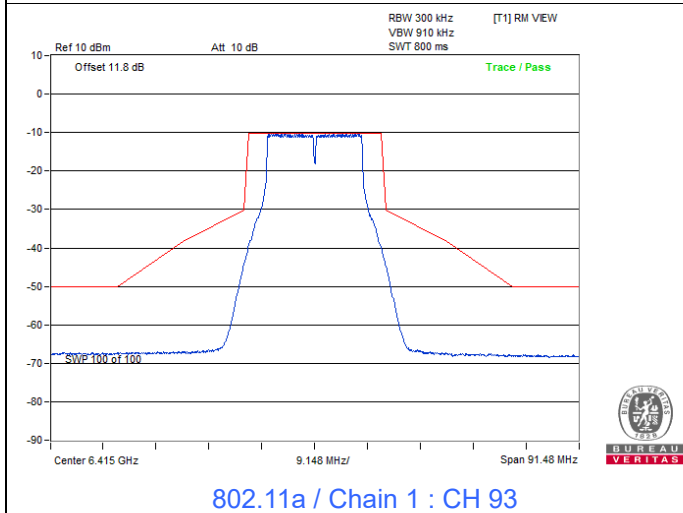
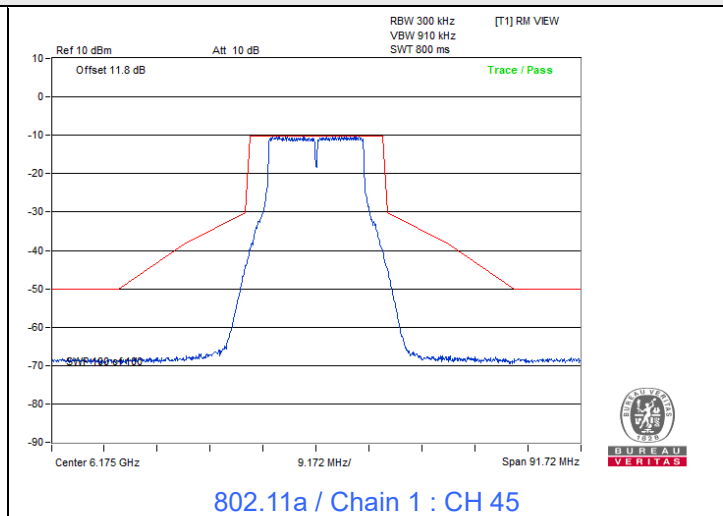
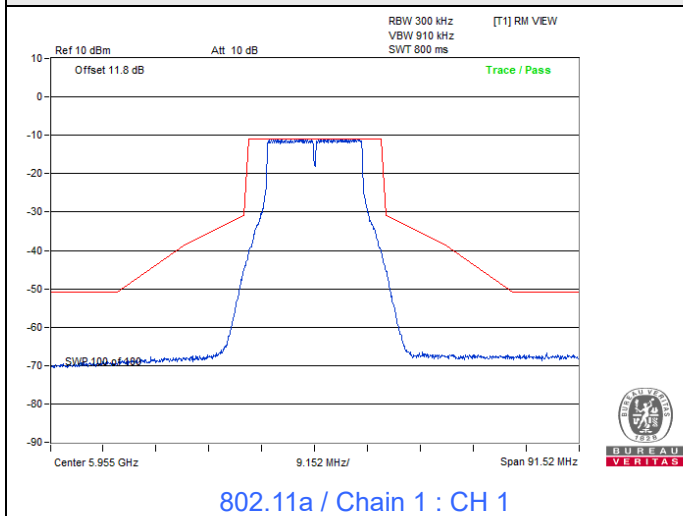
802.11a



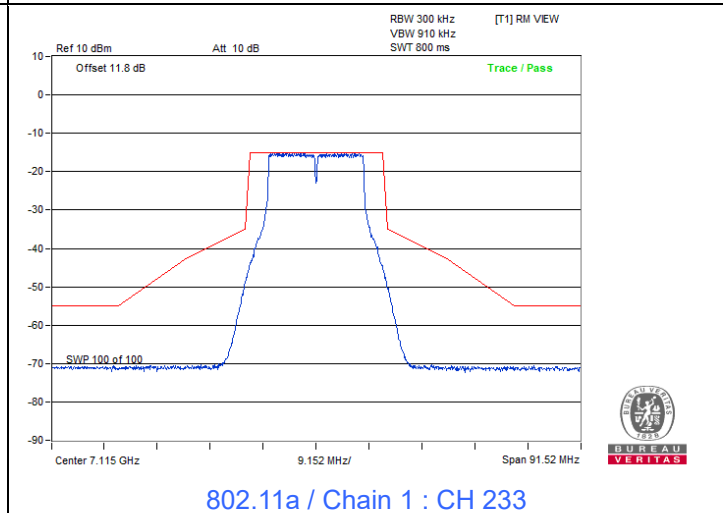
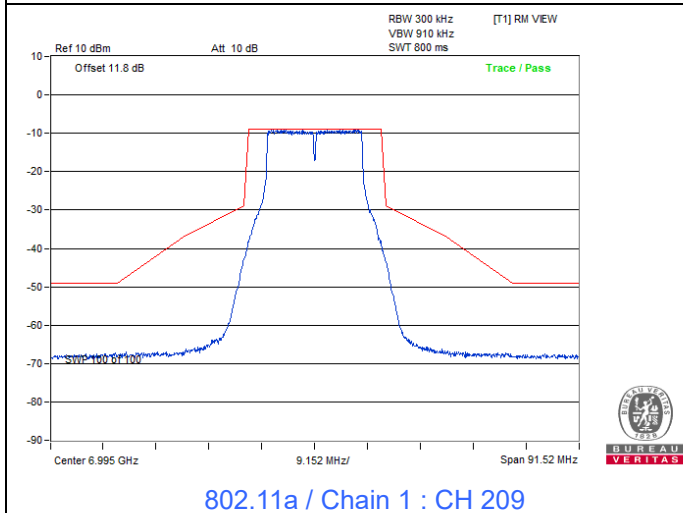
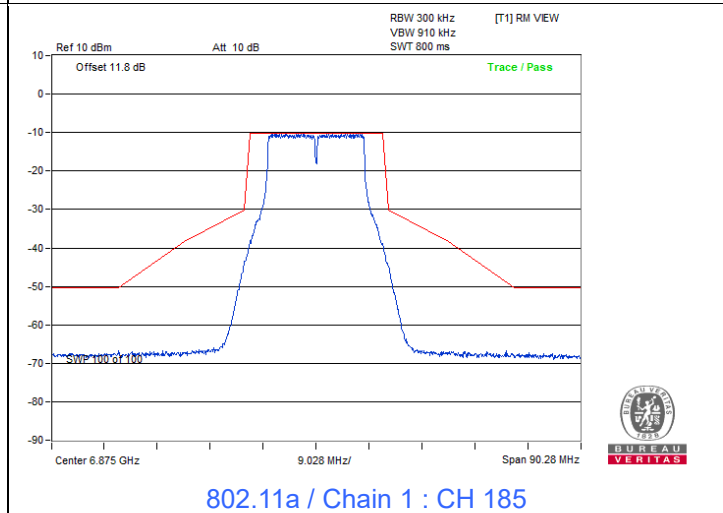
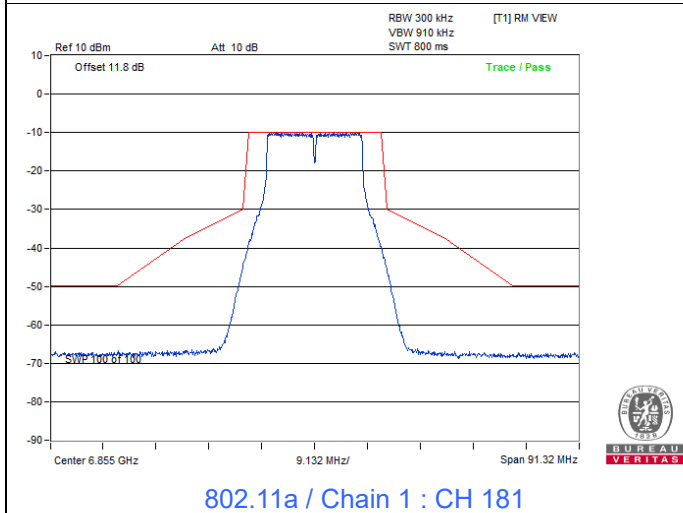
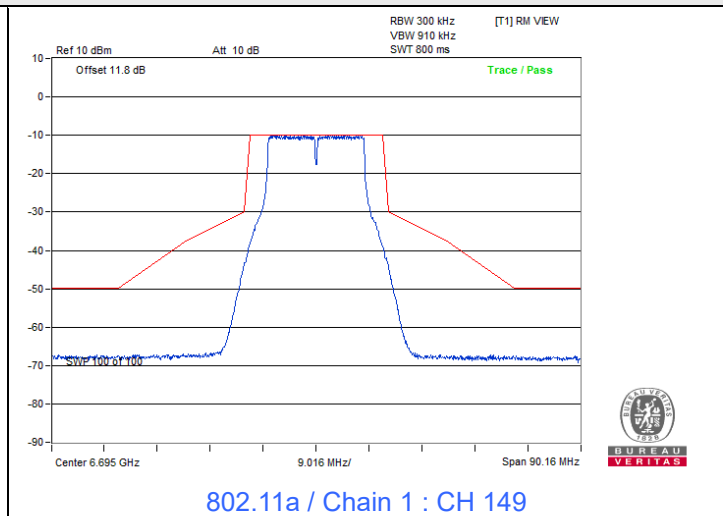
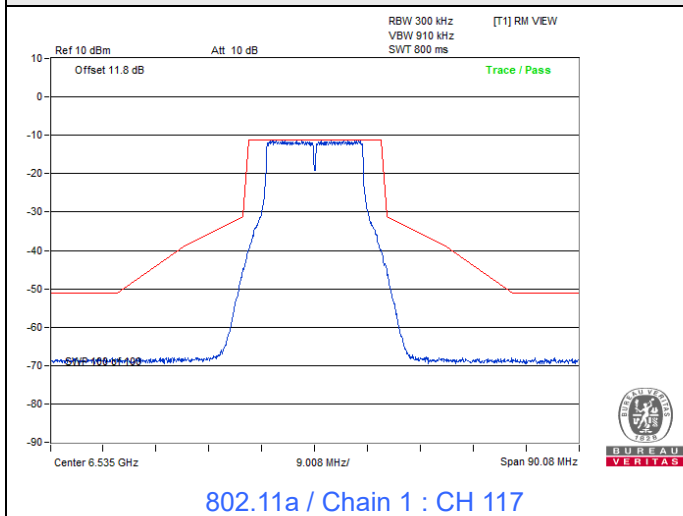
Spectrum Plot



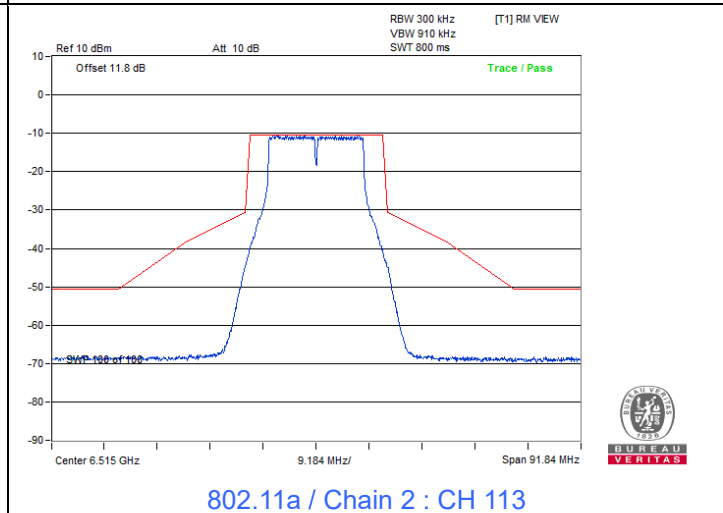
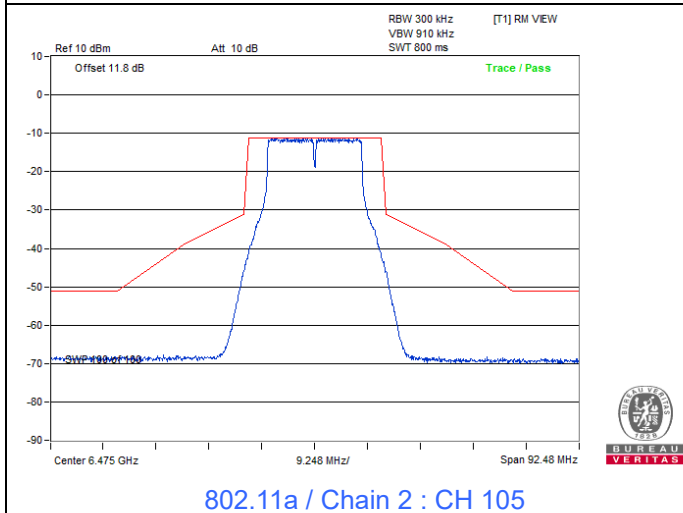
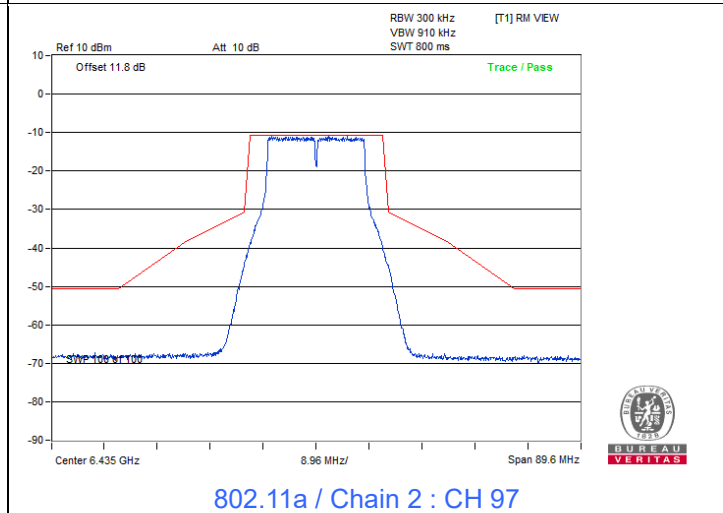
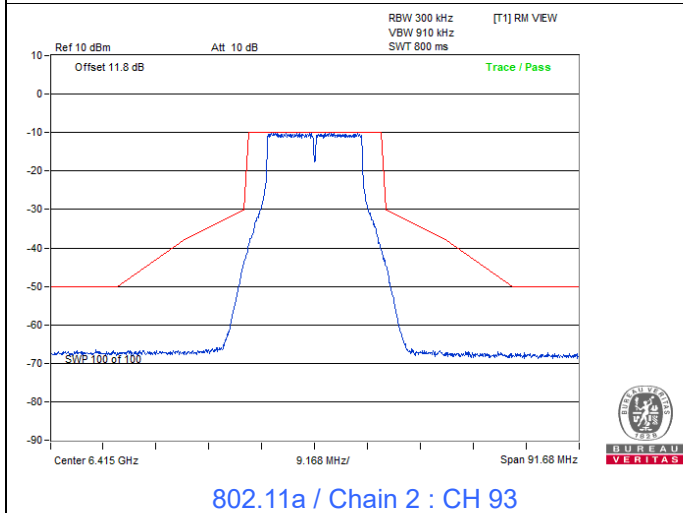
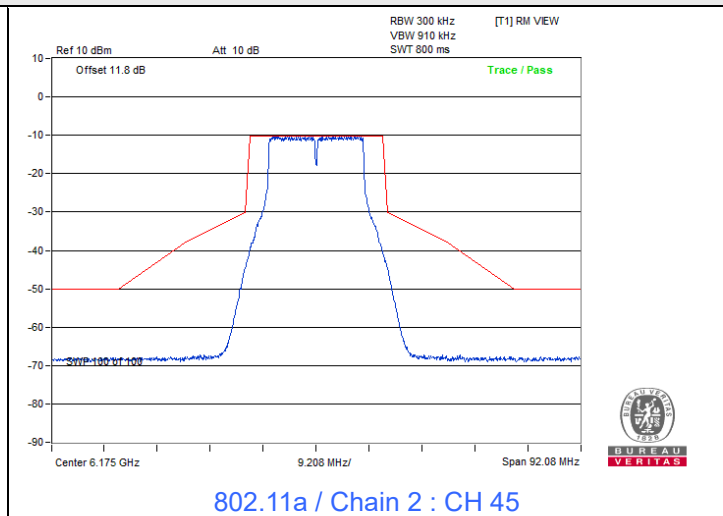
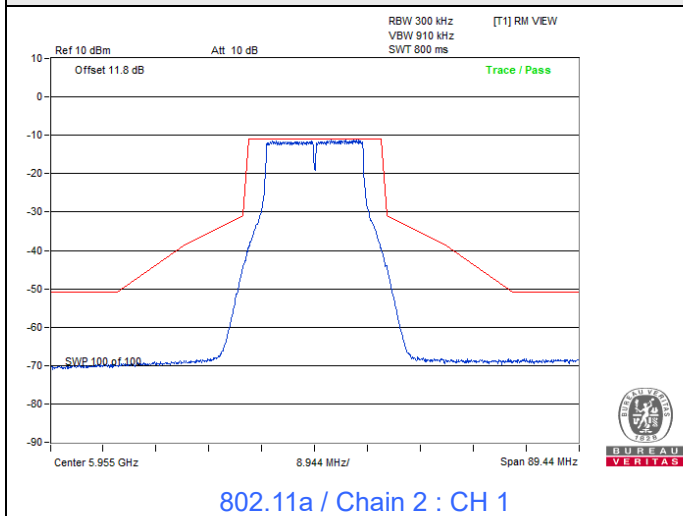
Spectrum Plot



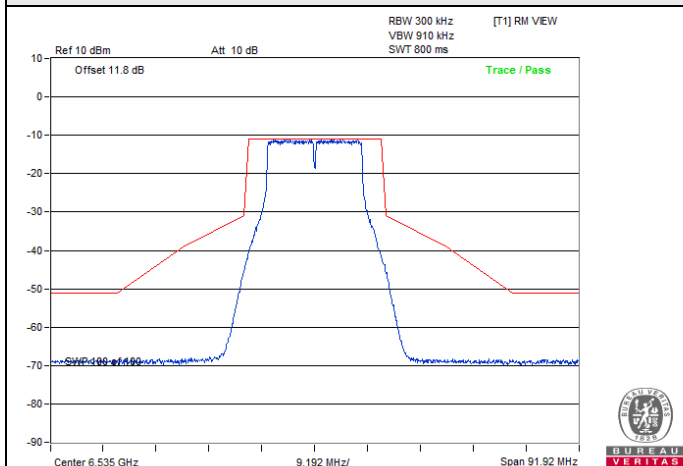
Spectrum Plot



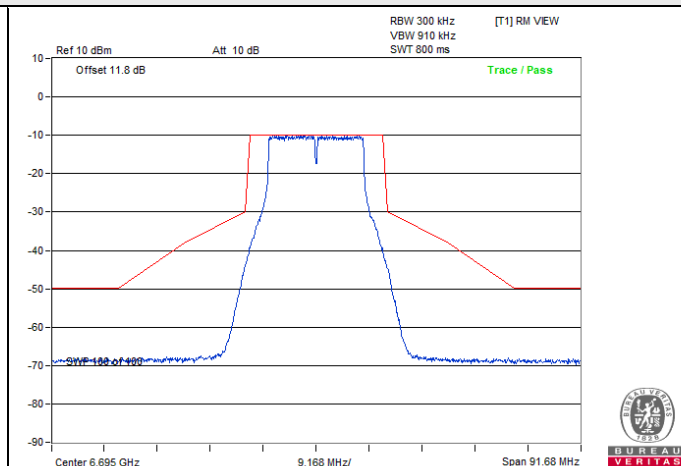
Spectrum Plot



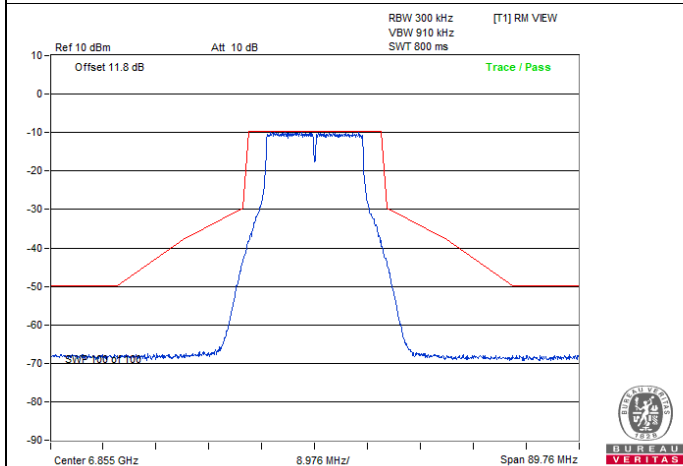
Spectrum Plot



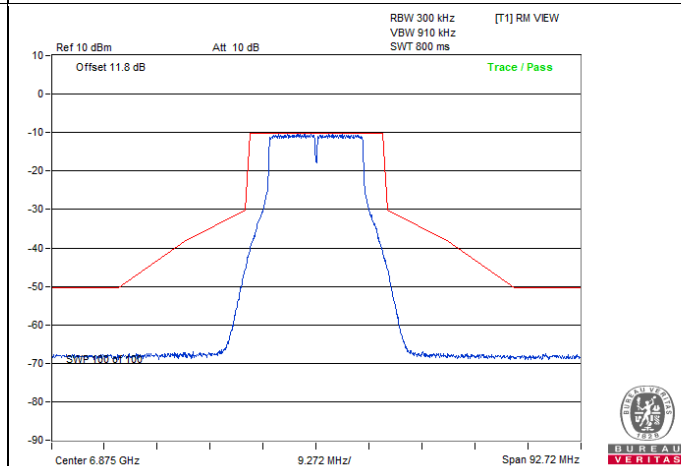
802.11a / Chain 2 : CH 117



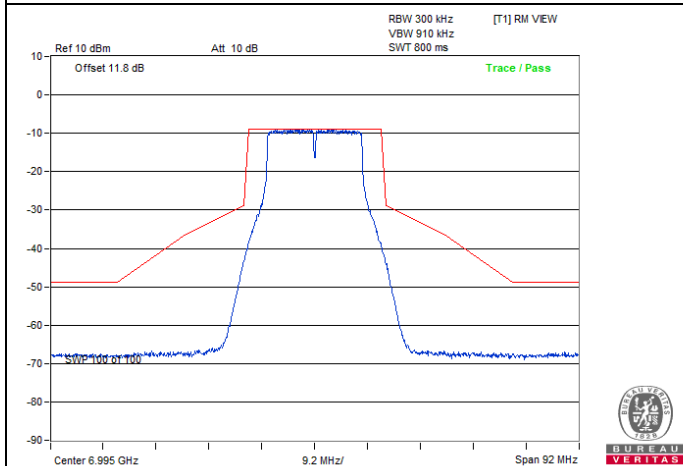
802.11a / Chain 2 : CH 149



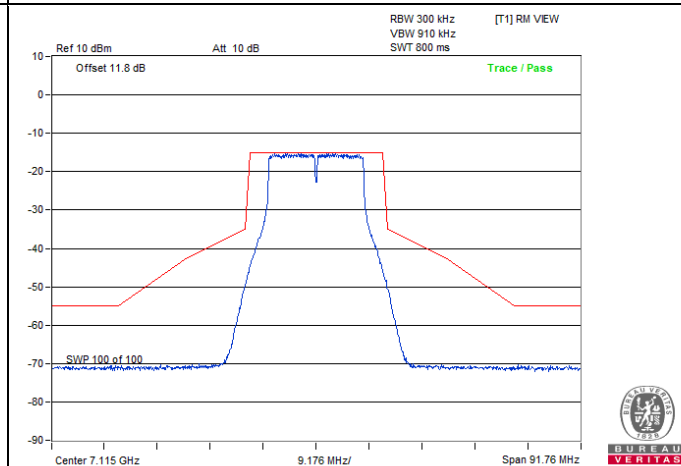
802.11a / Chain 2 : CH 181



802.11a / Chain 2 : CH 185

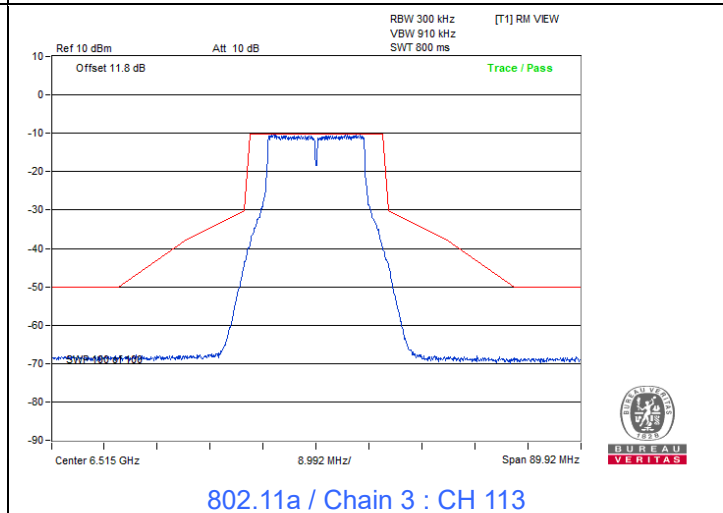
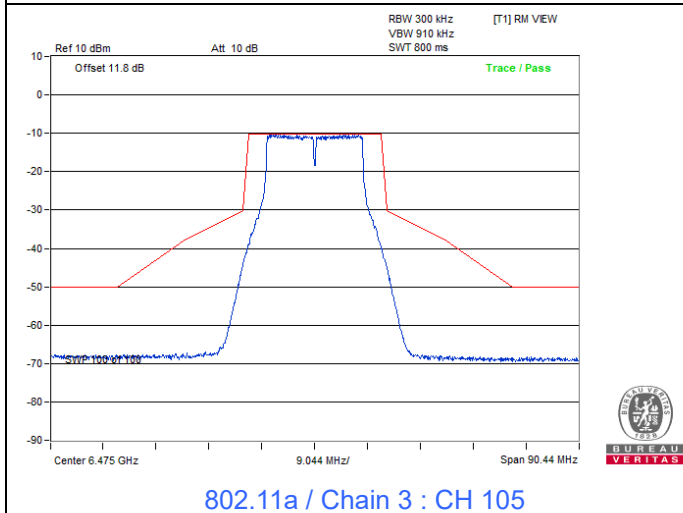
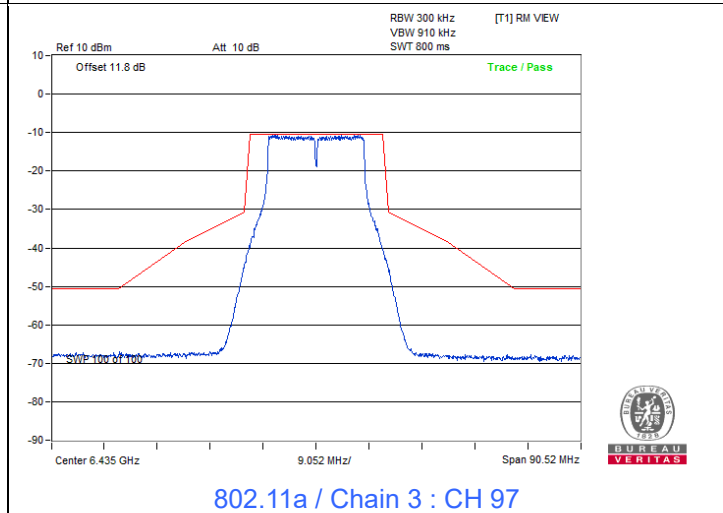
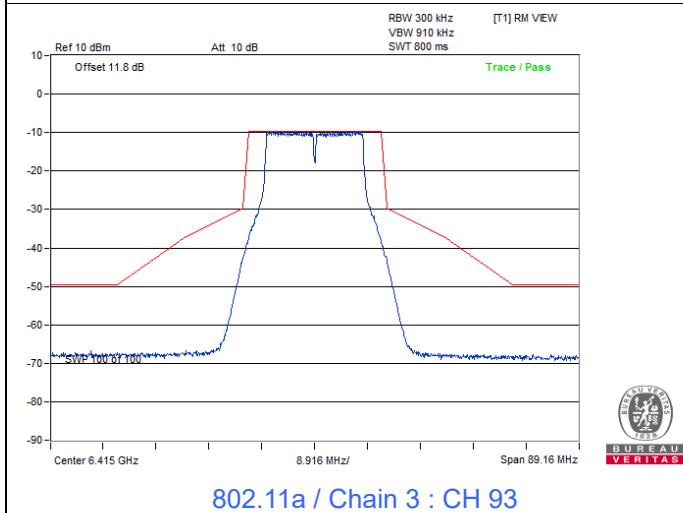
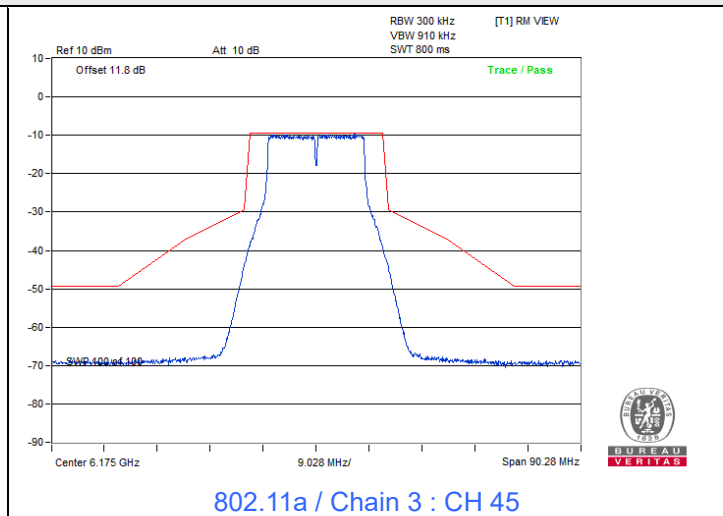
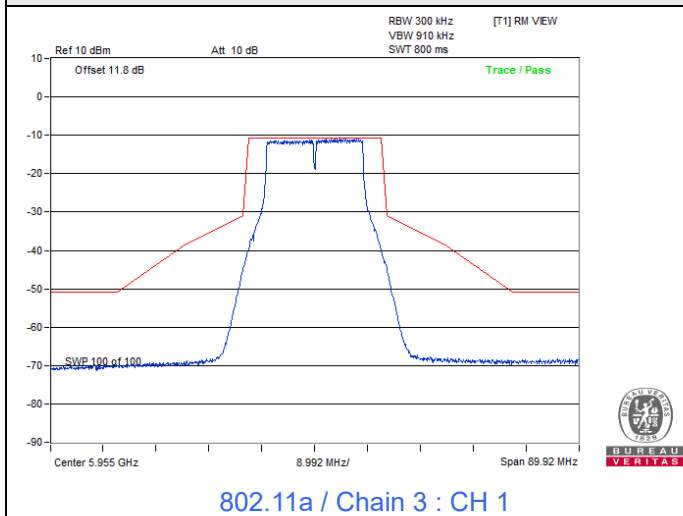


802.11a / Chain 2 : CH 209

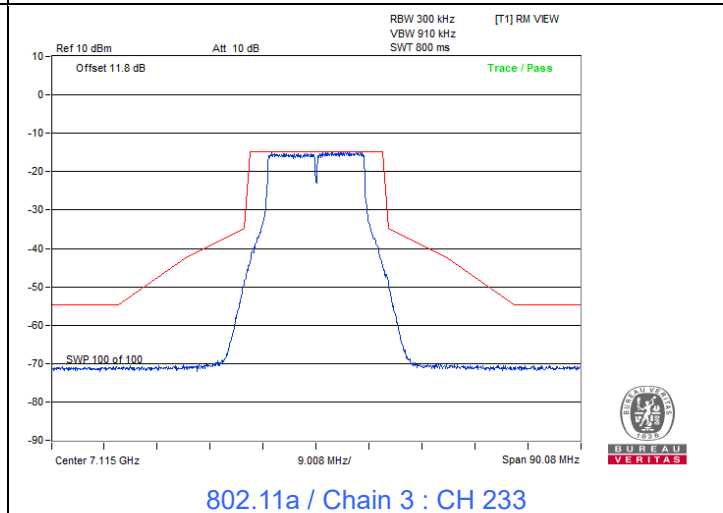
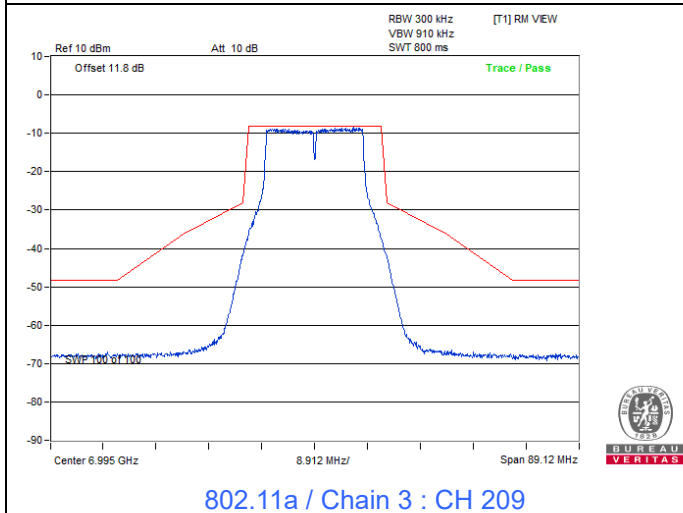
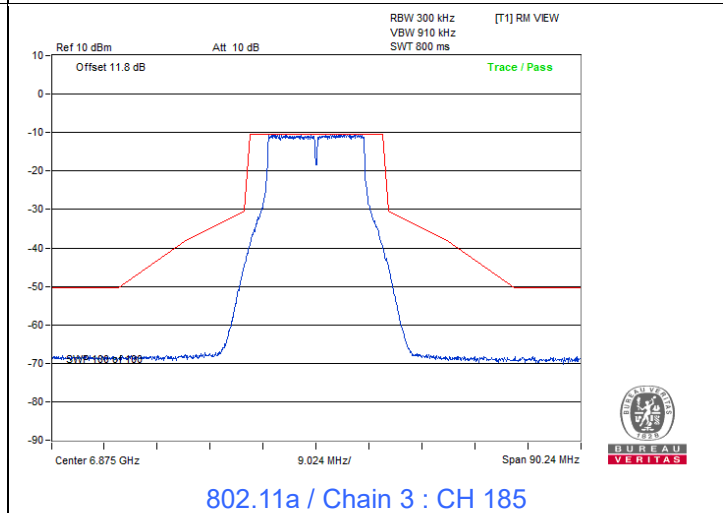
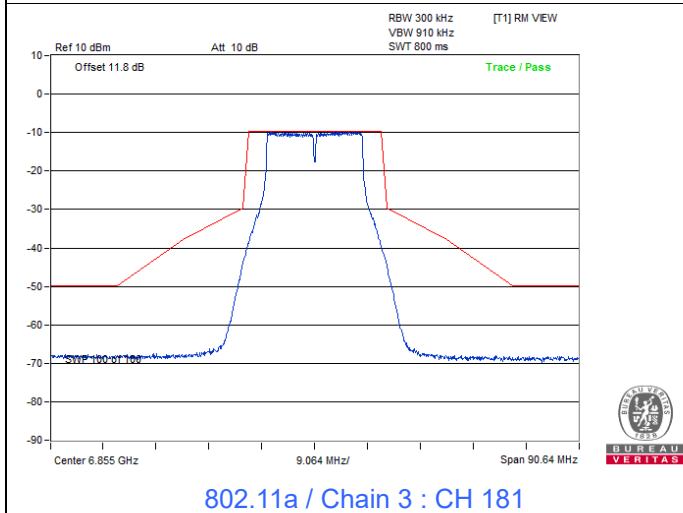
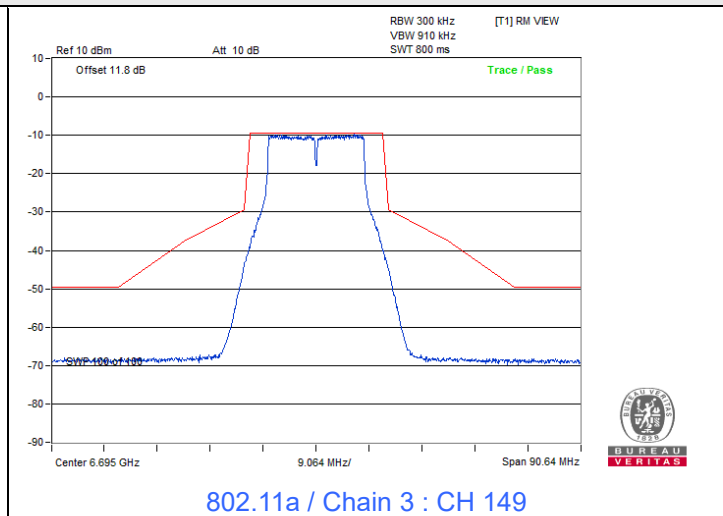
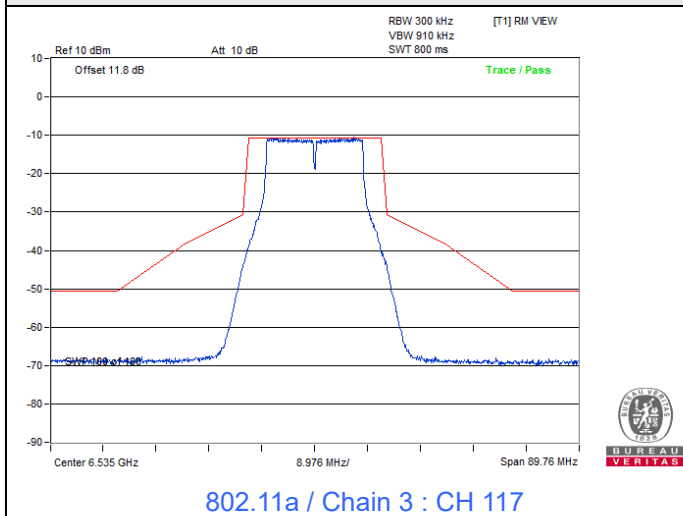


802.11a / Chain 2 : CH 233

Spectrum Plot

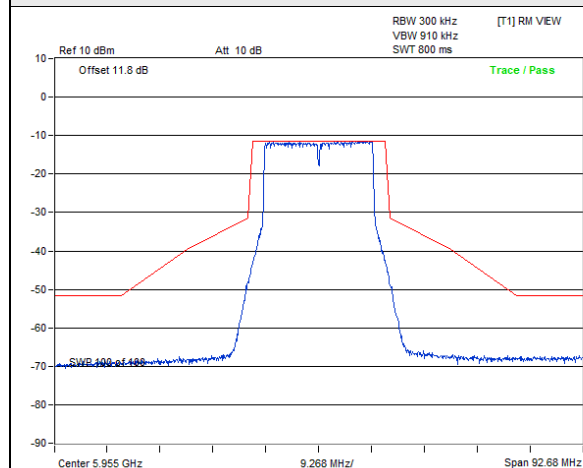


Spectrum Plot

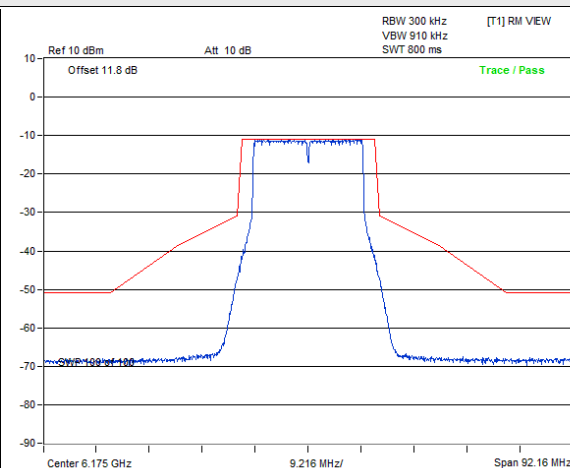


802.11be (EHT20)

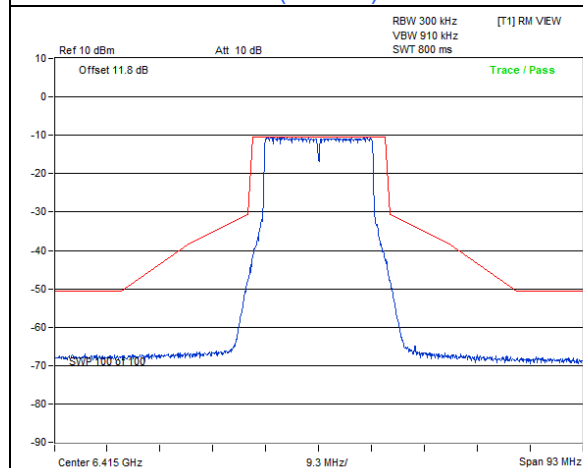
Spectrum Plot



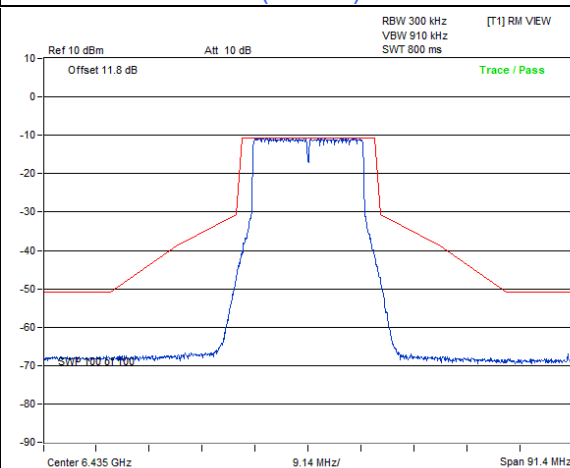
802.11be (EHT20) / Chain 0 : CH 1



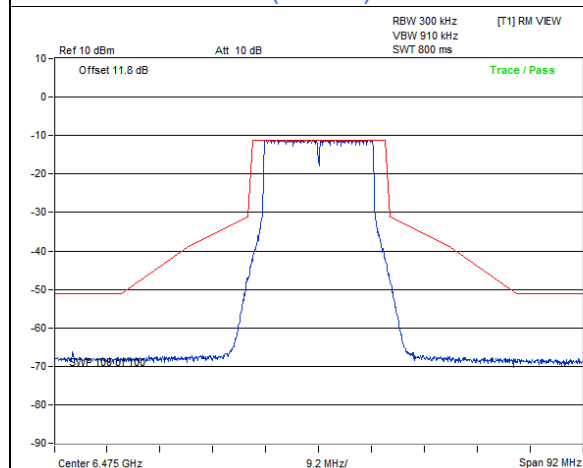
802.11be (EHT20) / Chain 0 : CH 45



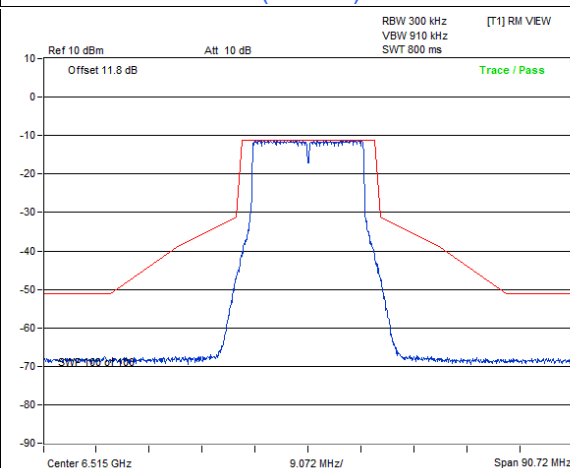
802.11be (EHT20) / Chain 0 : CH 93



802.11be (EHT20) / Chain 0 : CH 97

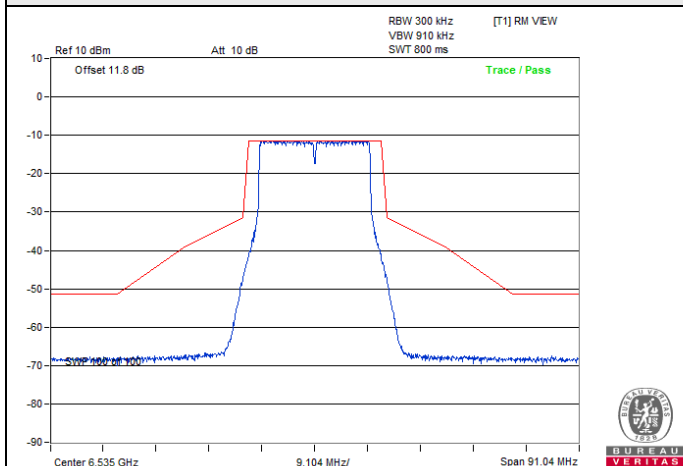


802.11be (EHT20) / Chain 0 : CH 105

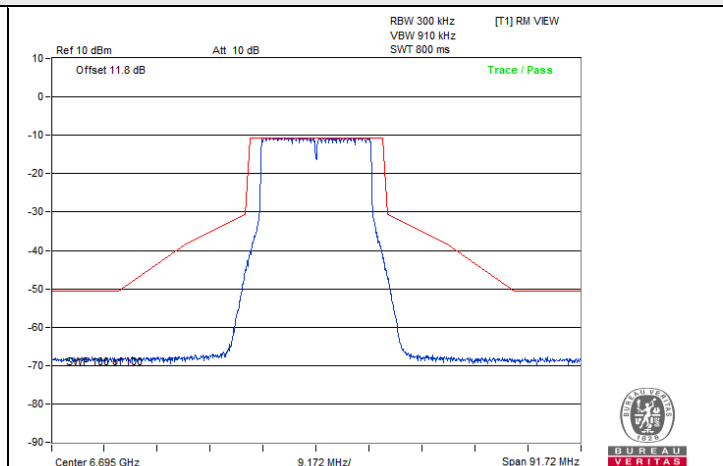


802.11be (EHT20) / Chain 0 : CH 113

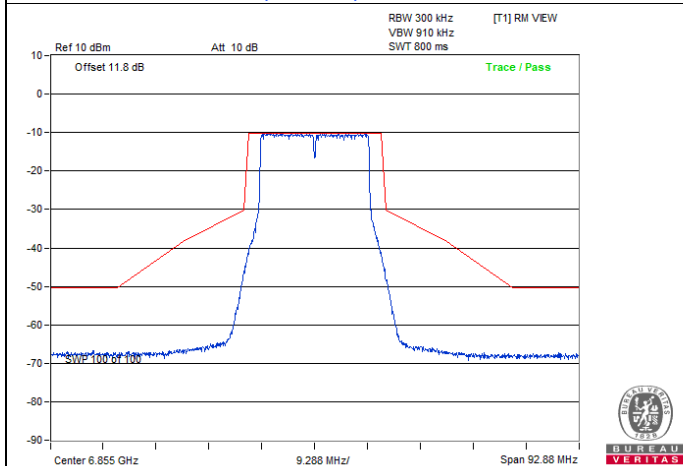
Spectrum Plot



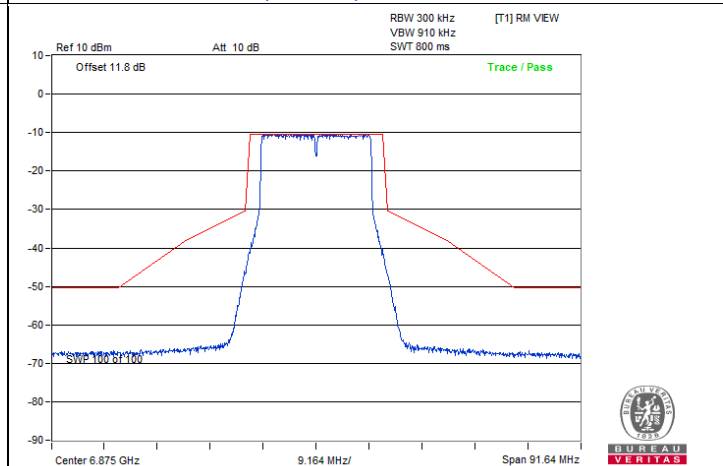
802.11be (EHT20) / Chain 0 : CH 117



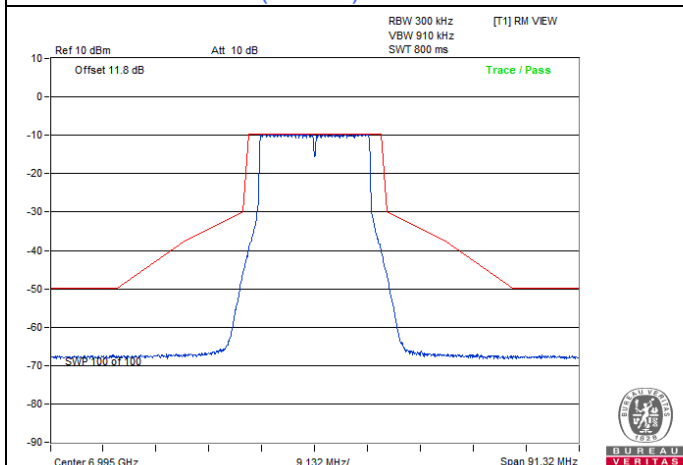
802.11be (EHT20) / Chain 0 : CH 149



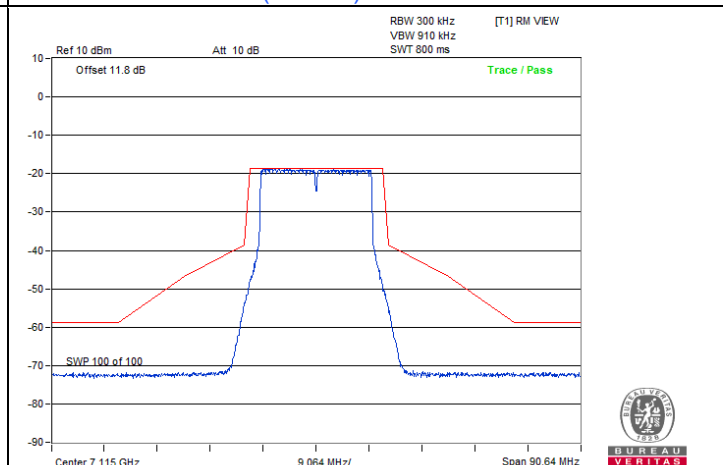
802.11be (EHT20) / Chain 0 : CH 181



802.11be (EHT20) / Chain 0 : CH 185

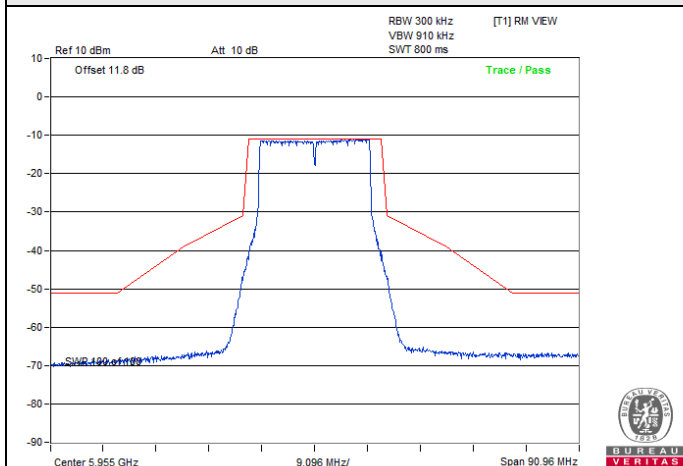


802.11be (EHT20) / Chain 0 : CH 209

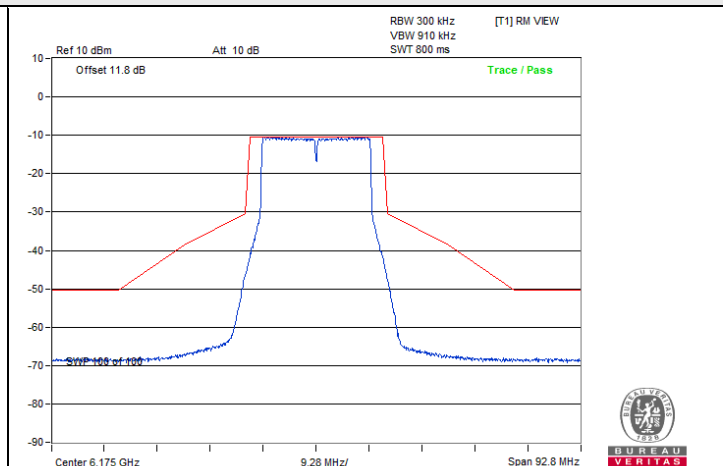


802.11be (EHT20) / Chain 0 : CH 233

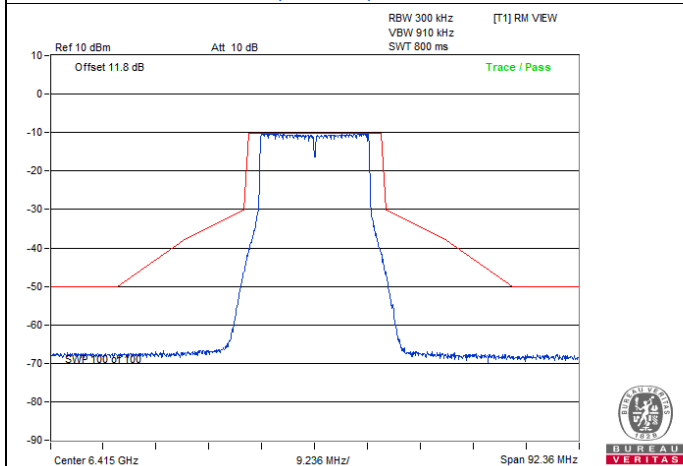
Spectrum Plot



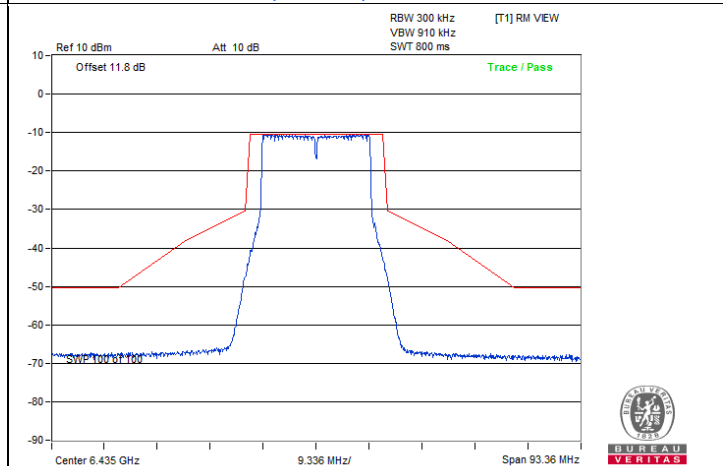
802.11be (EHT20) / Chain 1 : CH 1



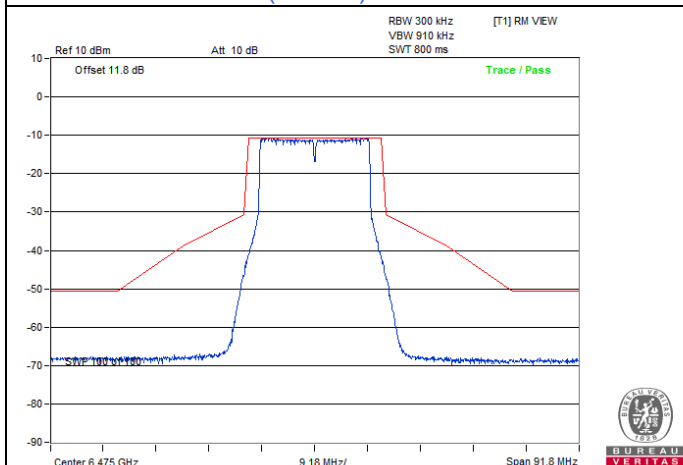
802.11be (EHT20) / Chain 1 : CH 45



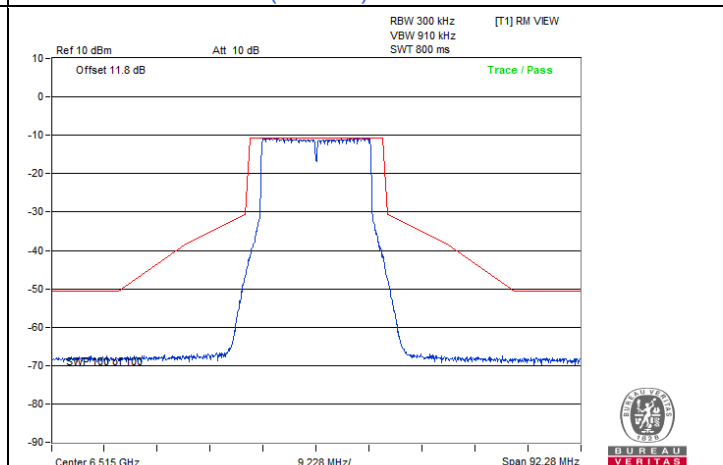
802.11be (EHT20) / Chain 1 : CH 93



802.11be (EHT20) / Chain 1 : CH 97

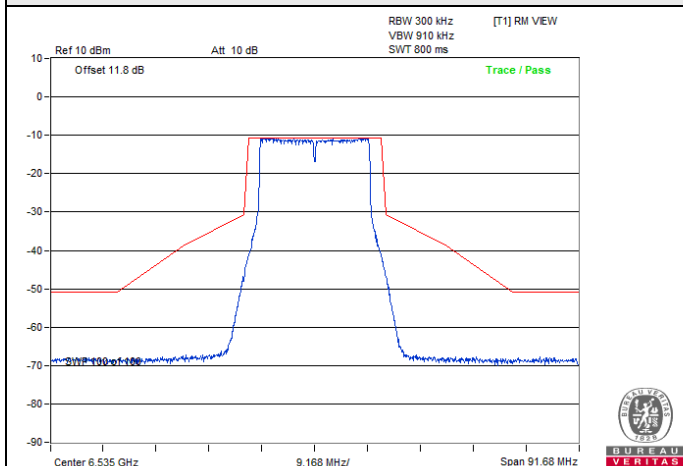


802.11be (EHT20) / Chain 1 : CH 105

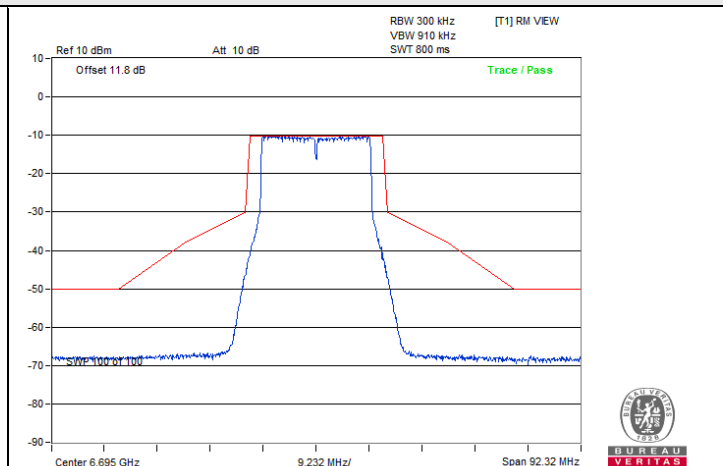


802.11be (EHT20) / Chain 1 : CH 113

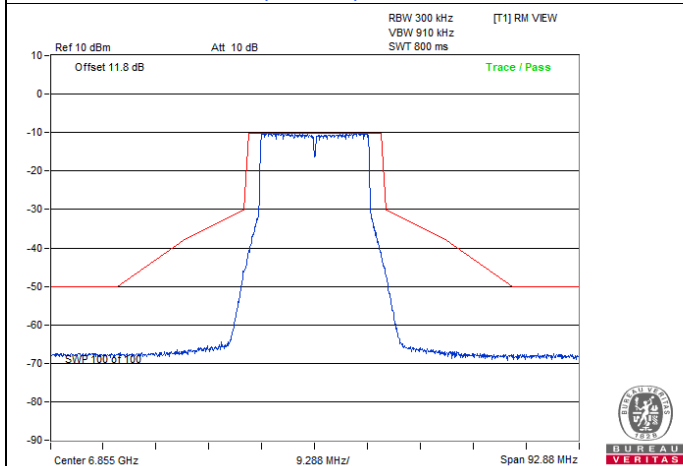
Spectrum Plot



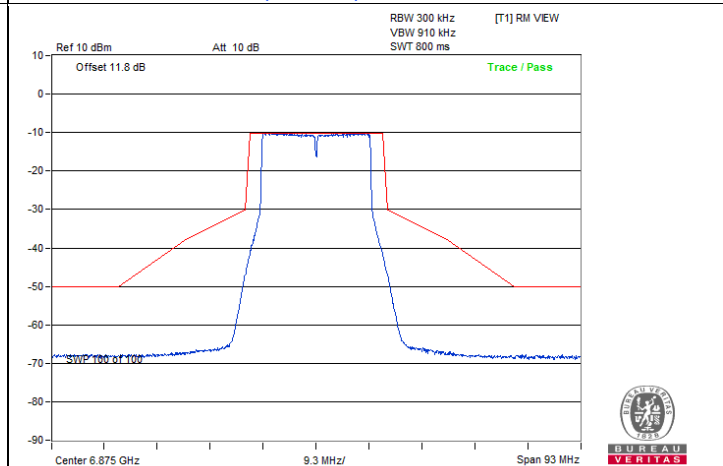
802.11be (EHT20) / Chain 1 : CH 117



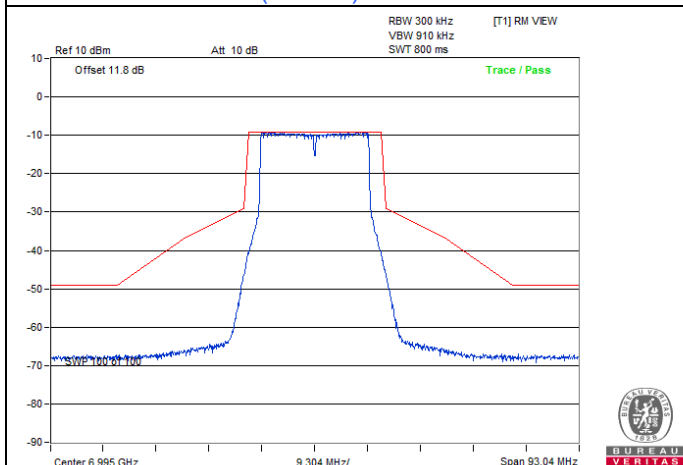
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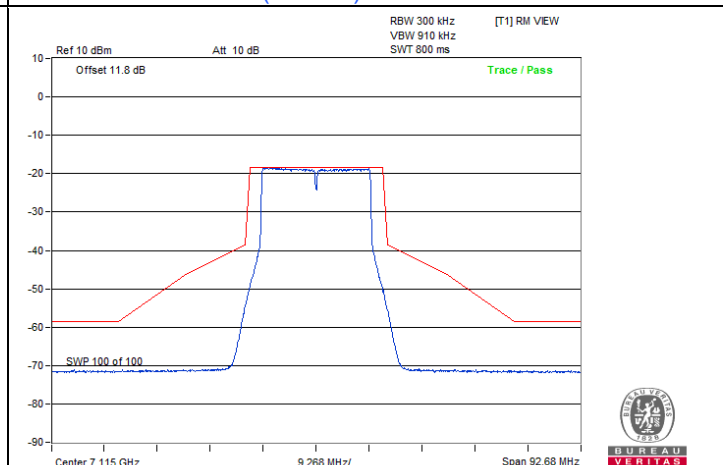
802.11be (EHT20) / Chain 1 : CH 181



802.11be (EHT20) / Chain 1 : CH 185

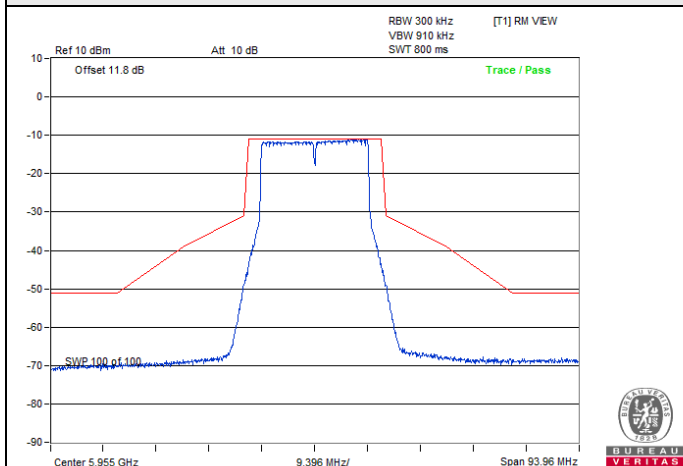


802.11be (EHT20) / Chain 1 : CH 209

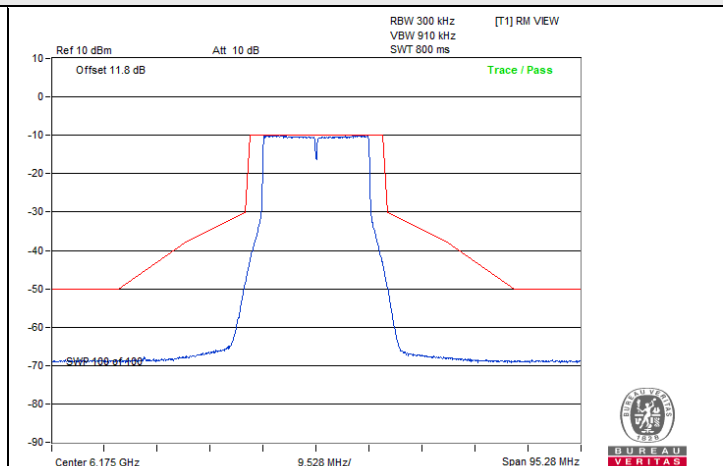


802.11be (EHT20) / Chain 1 : CH 233

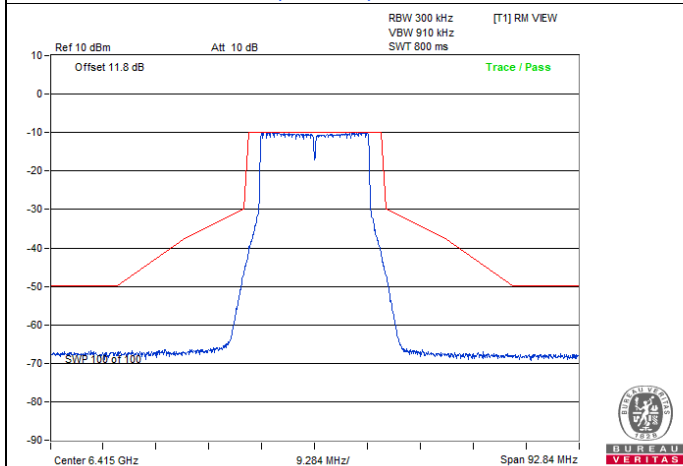
Spectrum Plot



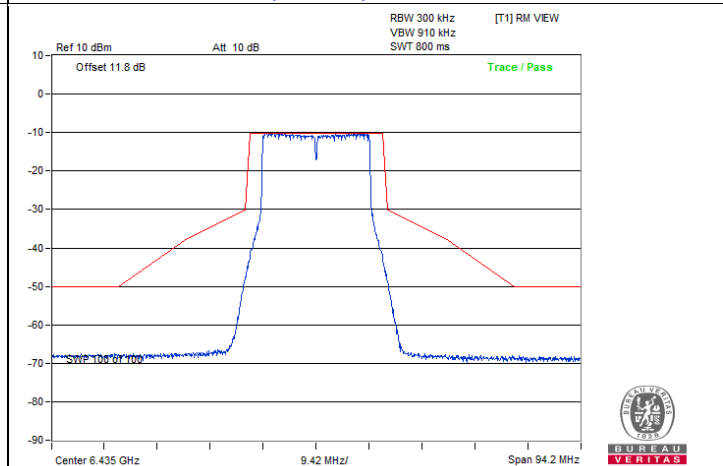
802.11be (EHT20) / Chain 2 : CH 1



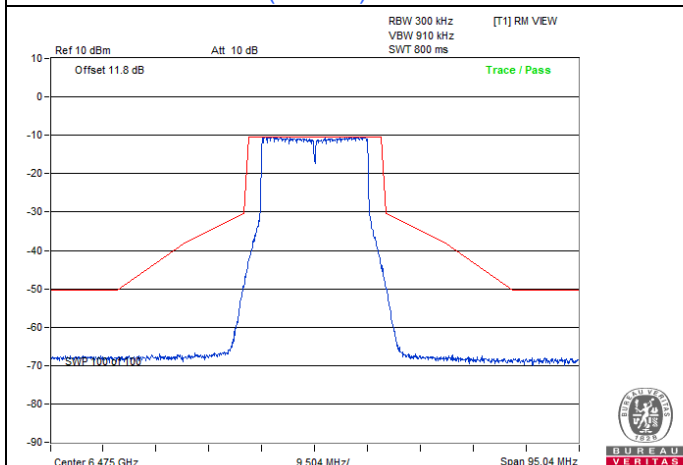
802.11be (EHT20) / Chain 2 : CH 45



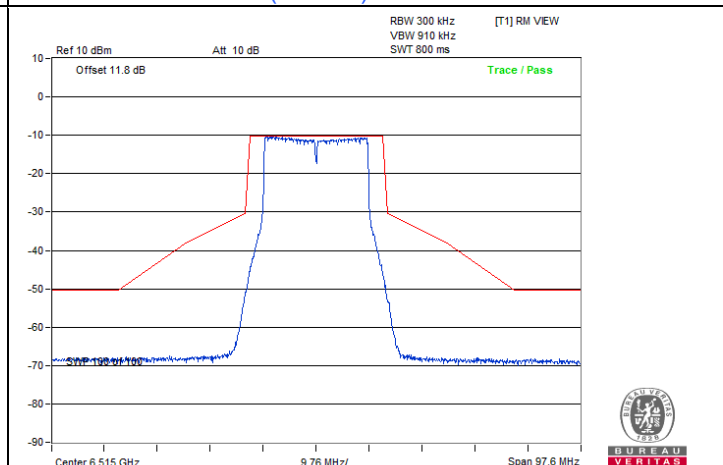
802.11be (EHT20) / Chain 2 : CH 93



802.11be (EHT20) / Chain 2 : CH 97

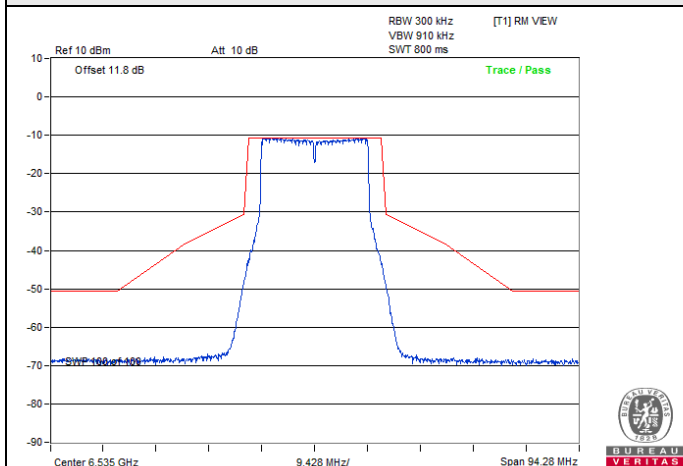


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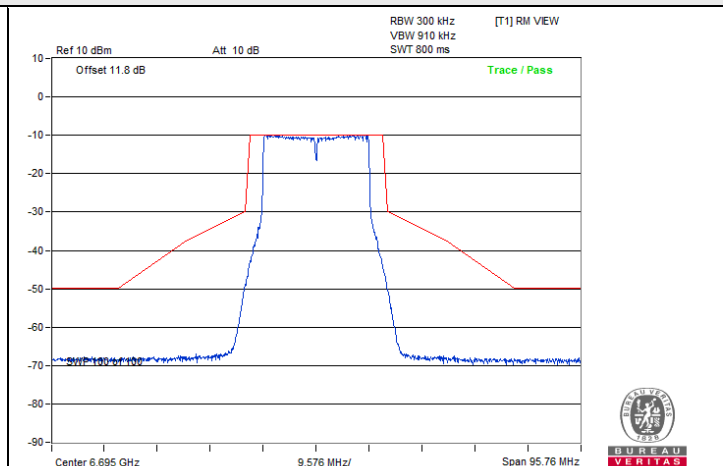


802.11be (EHT20) / Chain 2 : CH 113

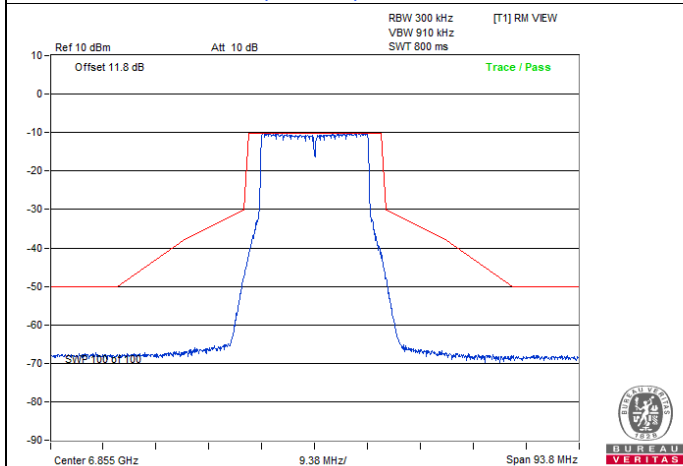
Spectrum Plot



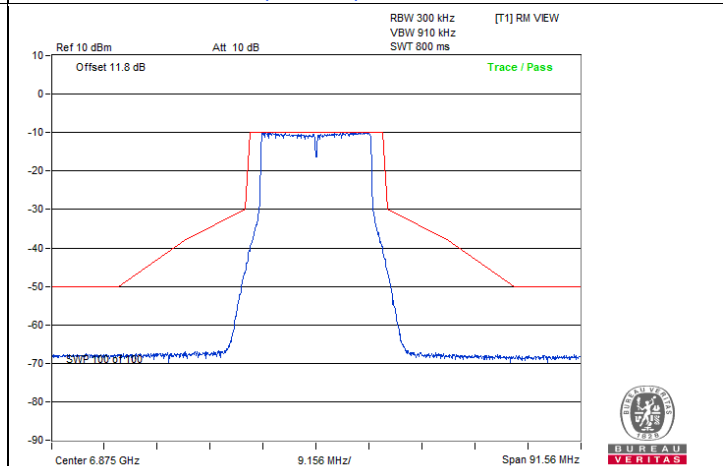
802.11be (EHT20) / Chain 2 : CH 117



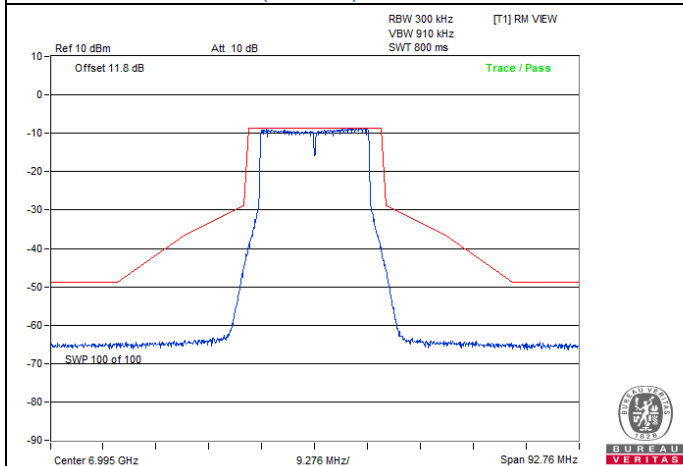
802.11be (EHT20) / Chain 2 : CH 149



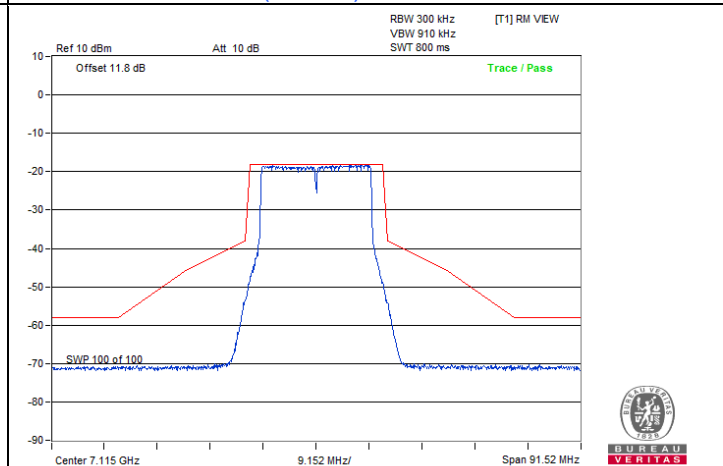
802.11be (EHT20) / Chain 2 : CH 181



802.11be (EHT20) / Chain 2 : CH 185

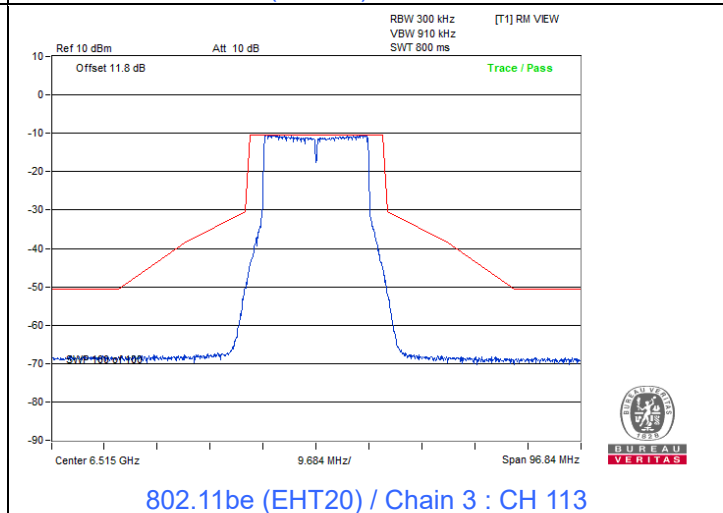
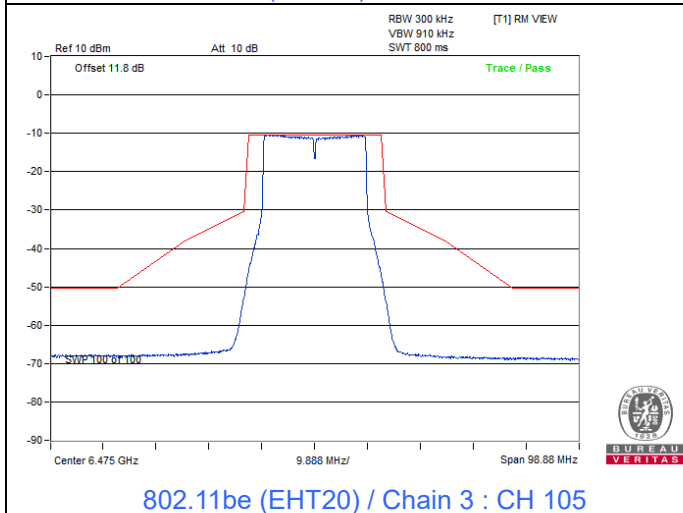
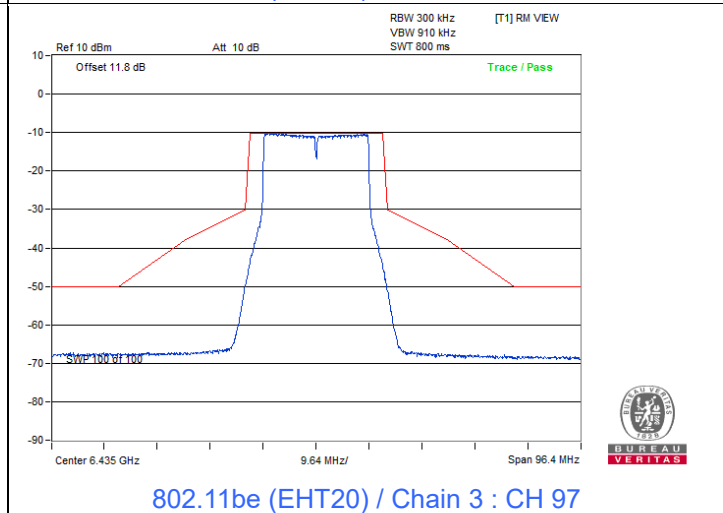
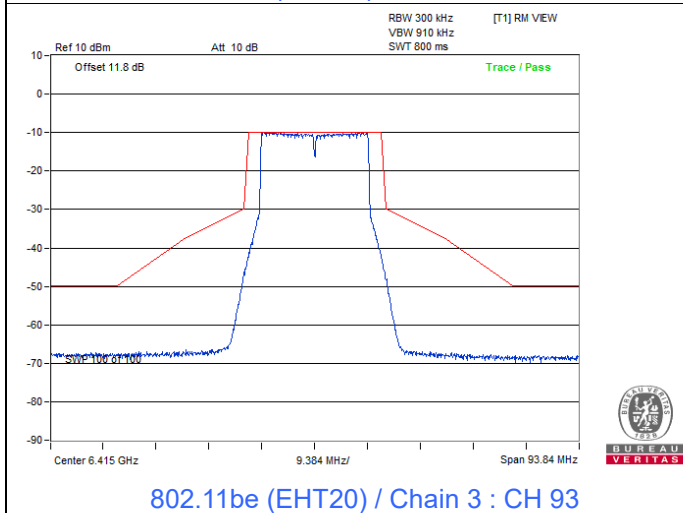
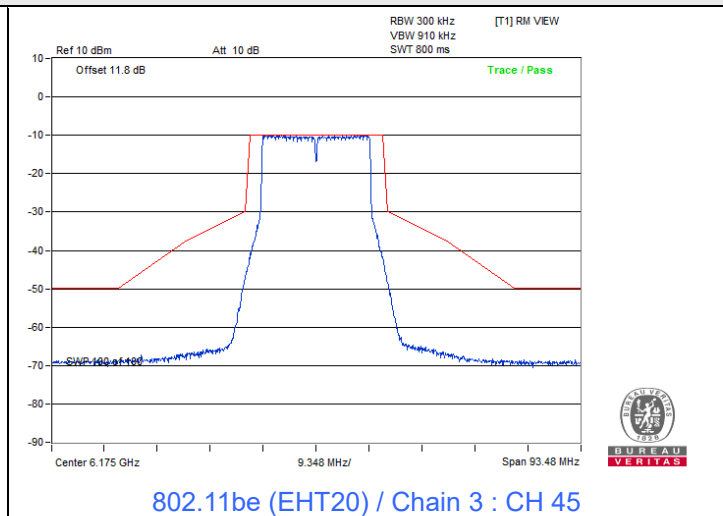
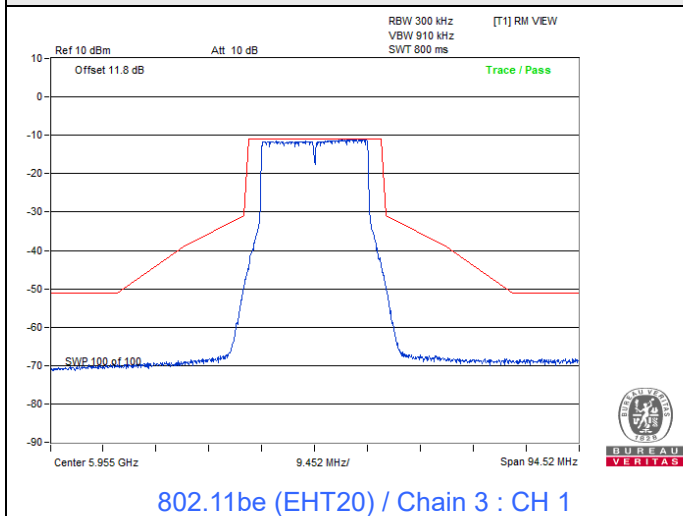


802.11be (EHT20) / Chain 2 : CH 209

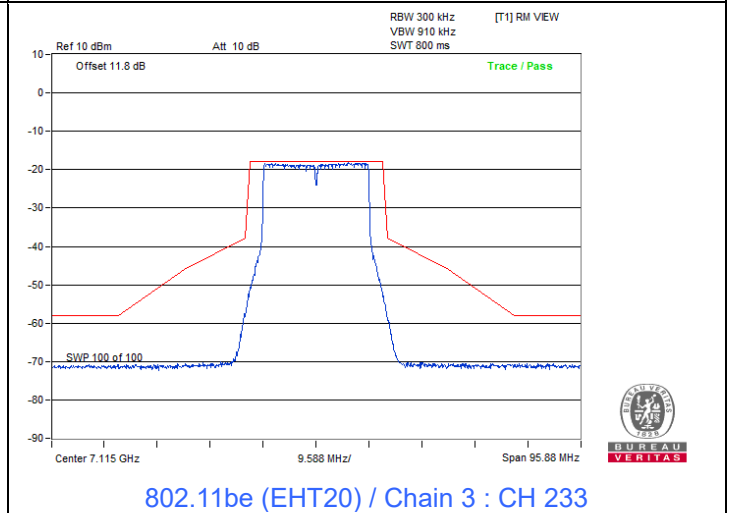
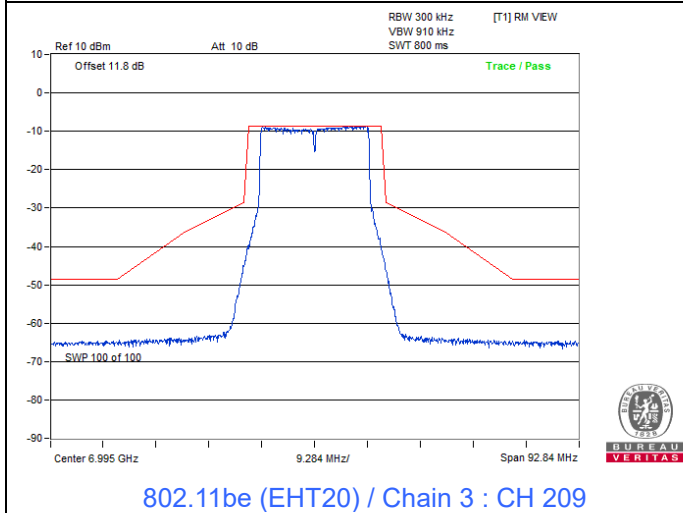
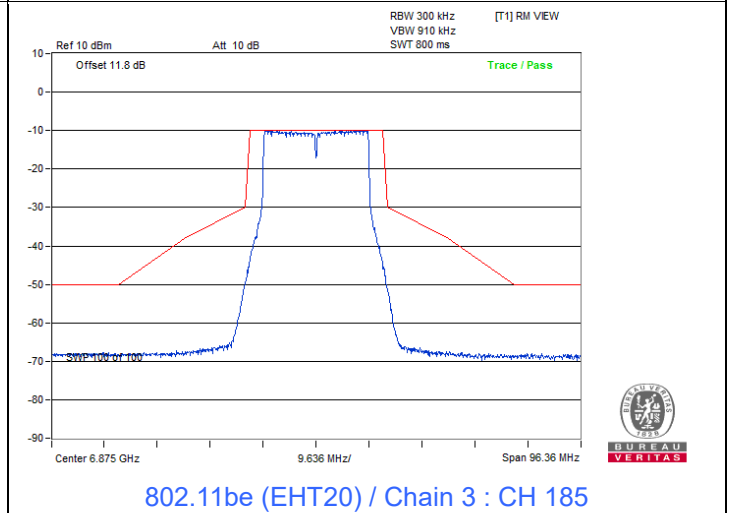
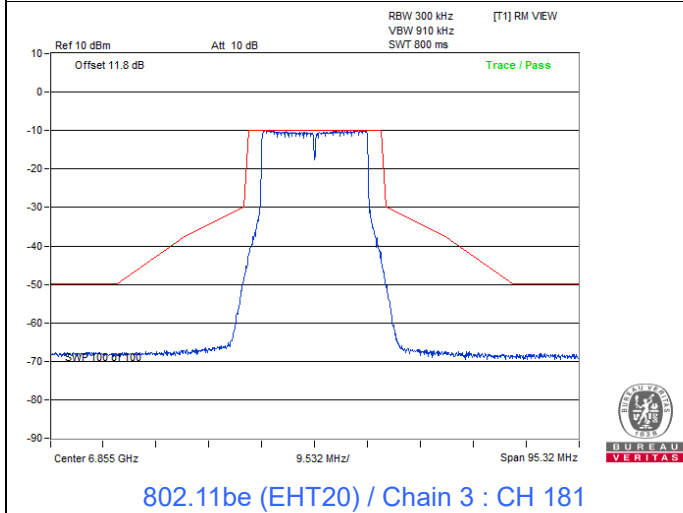
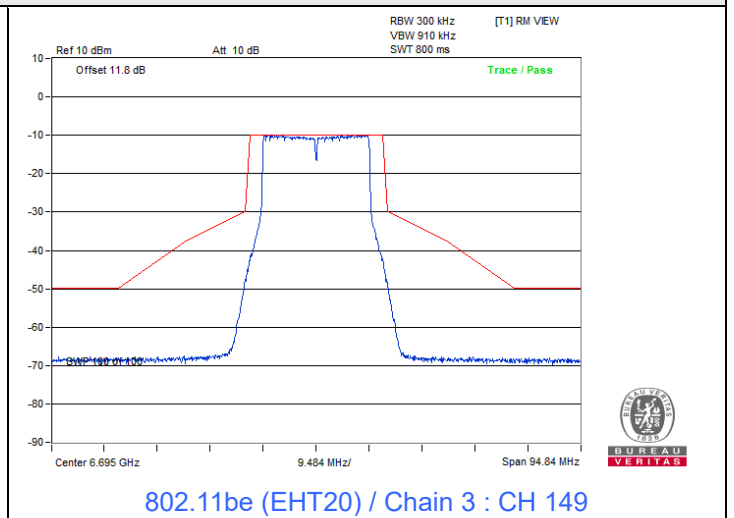
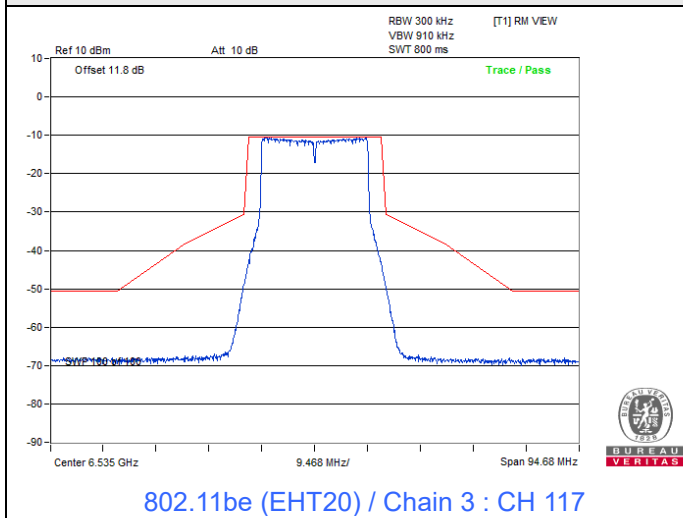


802.11be (EHT20) / Chain 2 : CH 233

Spectrum Plot

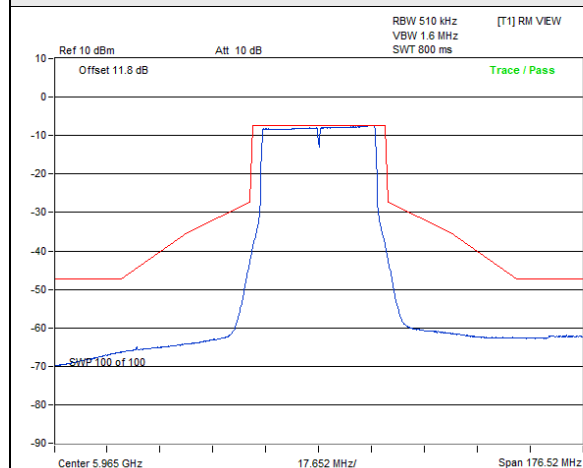


Spectrum Plot

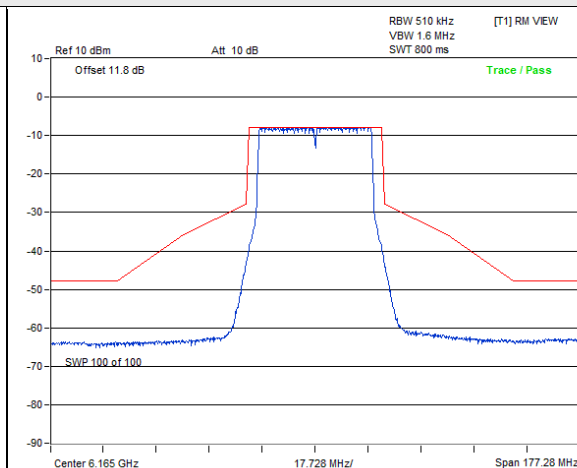


802.11be (EHT40)

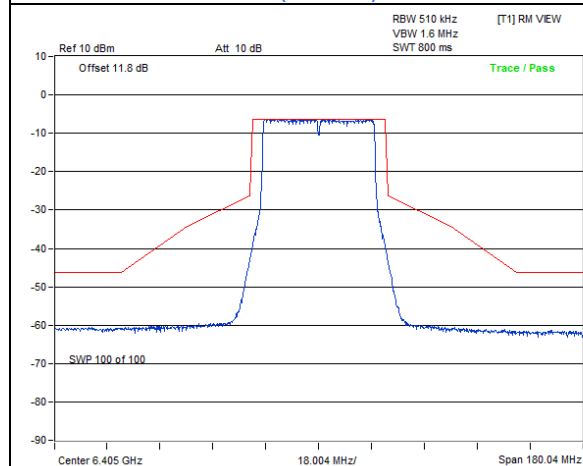
Spectrum Plot



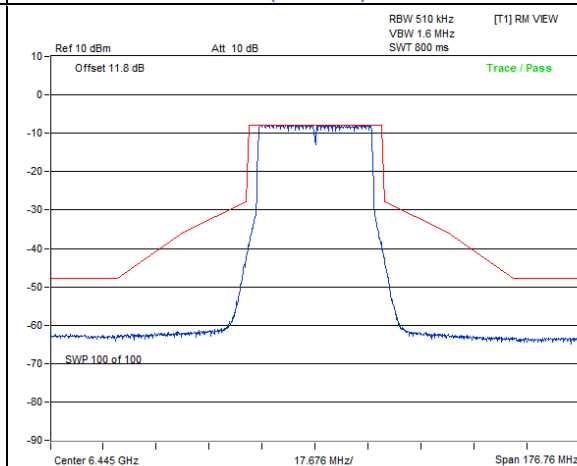
802.11be (EHT40) / Chain 0 : CH 3



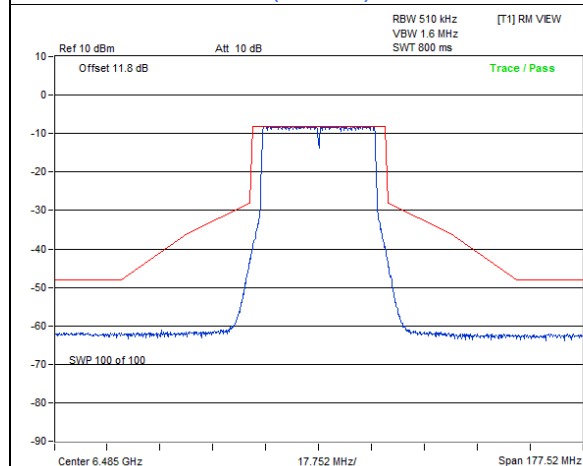
802.11be (EHT40) / Chain 0 : CH 43



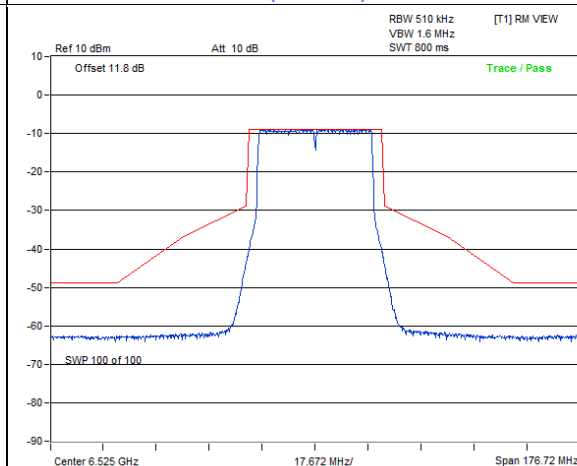
802.11be (EHT40) / Chain 0 : CH 91



802.11be (EHT40) / Chain 0 : CH 99

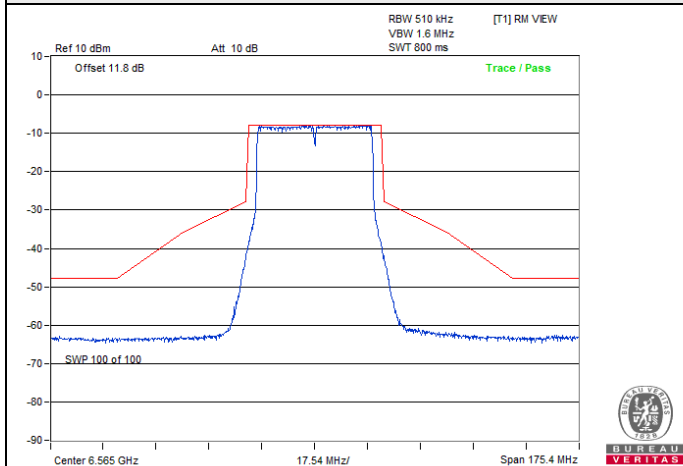


802.11be (EHT40) / Chain 0 : CH 107

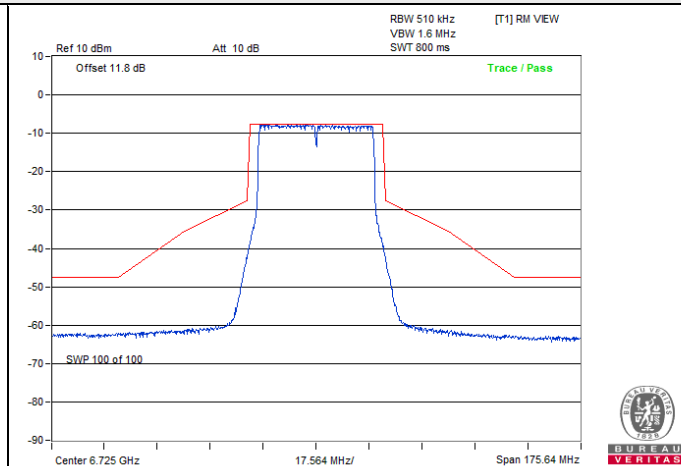


802.11be (EHT40) / Chain 0 : CH 115

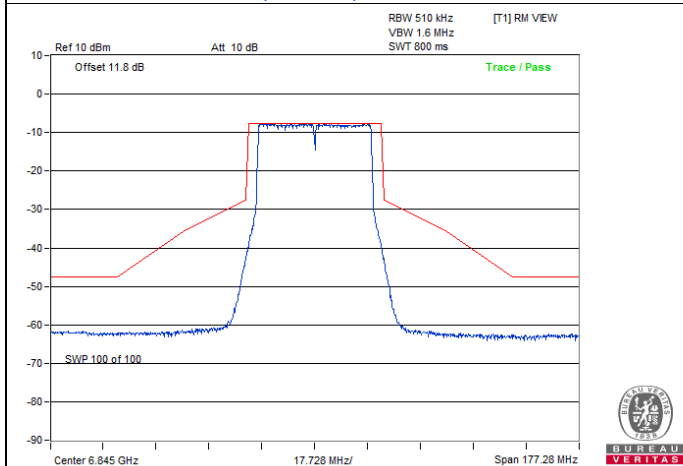
Spectrum Plot



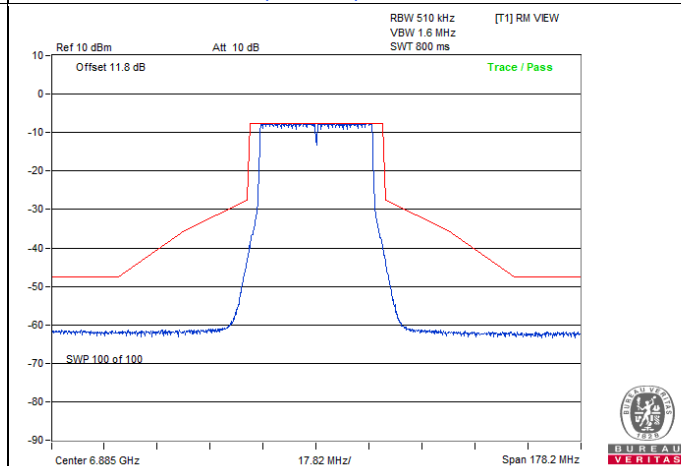
802.11be (EHT40) / Chain 0 : CH 123



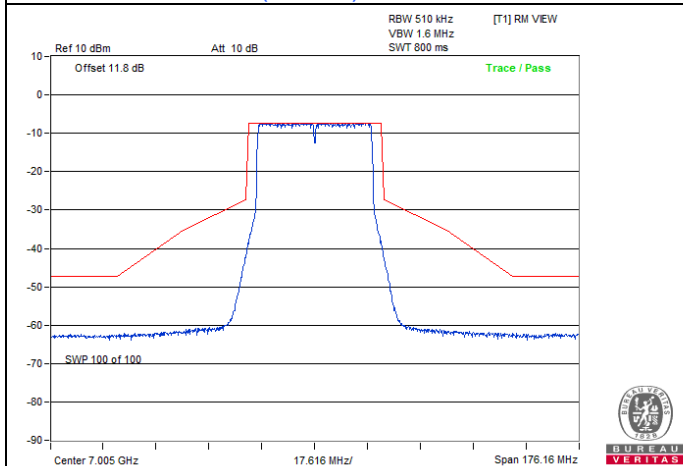
802.11be (EHT40) / Chain 0 : CH 155



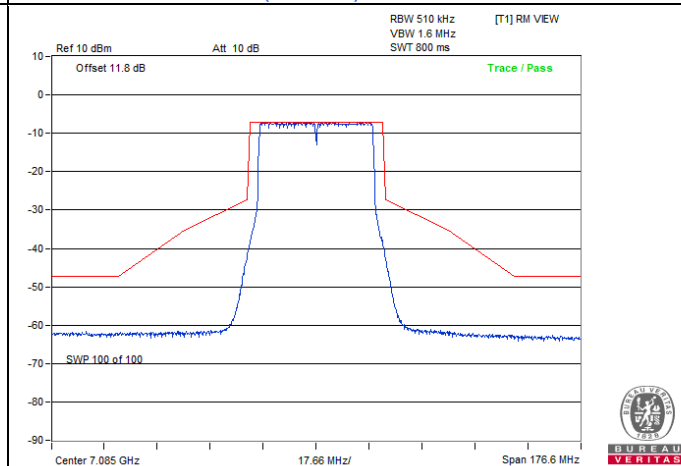
802.11be (EHT40) / Chain 0 : CH 179



802.11be (EHT40) / Chain 0 : CH 187



802.11be (EHT40) / Chain 0 : CH 211



802.11be (EHT40) / Chain 0 : CH 227